Florida WILDLIFE

Fishing · Hunting · Conservation · Outdoor Recreation

After You Get There
Fish Sampling Methods

MAY 1967 — The Florida Magazine for all Sportsmen — 25 CENTS

Florida Wildlife Scrapbook

ANIMAL AGES

COMPARED TO MAN- THE LIFE SPAN OF ANIMALS SUCH AS BIRDS, MAMMALS, REPTILES AND FISHES IS MUCH SHORTER • MAXIMUM RECORDED AGES ARE USUALLY ACHIEVED BY INDIVIDUALS LIVING PROTECTED LIVES IN CONFINEMENT IN ZOOS • ANIMALS IN THE WILD, BESET BY MANY PHYSICAL HAZARDS and CONTAMINATION and SHORTAGES OF FOOD AND WATER, MAY NEVER ATTAIN LONG LIFE • HERE ARE A FEW ANIMAL AGES LISTED BY ZOOLOGISTS —

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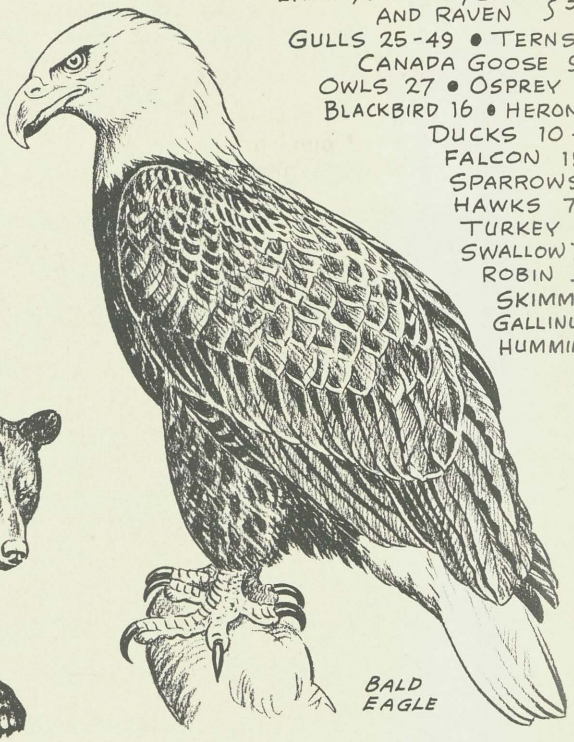

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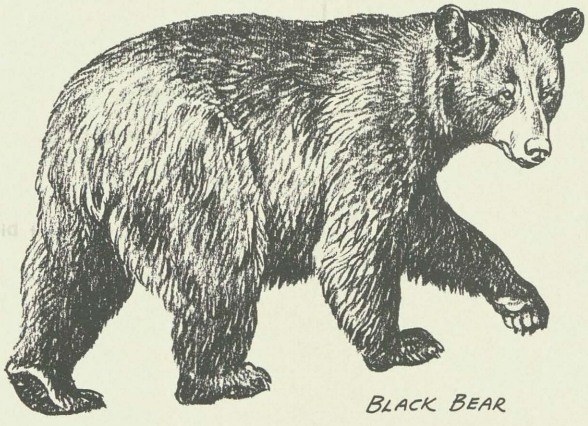

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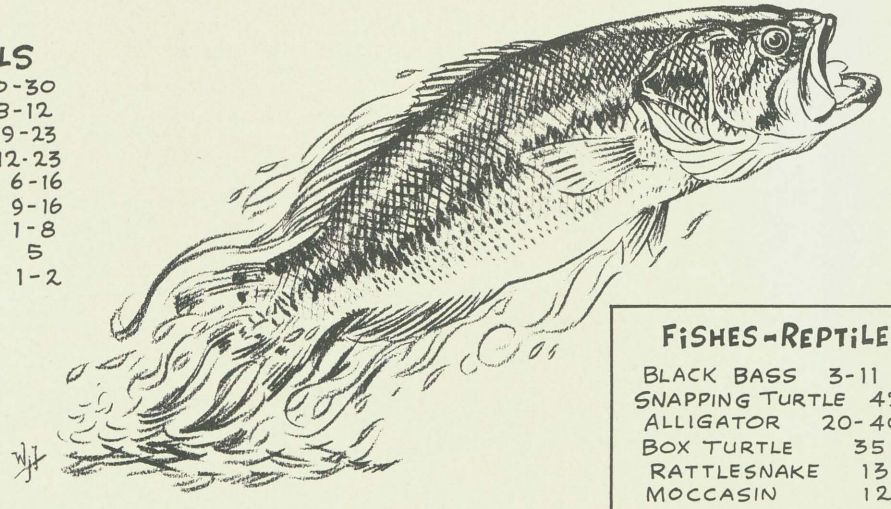

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The Cover

The Painted Bunting is more often called Nonpareil, meaning "without equal." The colorful male, above, lends a rather exotic tropical beauty to the more northern climes. The female is the only true green-colored bird living in North America. Only about five inches long, the Painted Bunting is found throughout Florida wintering in the southern part, and nesting across the northern section. It can be found in roadside thickets, hedgerows, field edges, open scrubby country and town gardens.

From A Painting By Wallace Hughes

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ROSE TALLAHASSEE

Game Management Notes

UNDER GAME COMMISSION supervision, a graduate research student from the University of Florida is working on our state's only non-migratory waterfowl—the Florida duck.

Biologists wonder if this duck can be exposed to more hunting pressure than the federal regulations which apply to it now allow. They also feel that the hunter's gun is less of a factor than the weather in determining this bird's abundance.

Figures and facts from this research project may eventually substantiate the biologist's theories and lead to possible relaxed regulations.

AS MAN CONTINUES to rearrange the surface of Florida, the changes wrought have a direct bearing on the welfare of many species of wildlife. In rare cases, wildlife benefits. Commonly, it suffers.

For a factual interpretation, however, "before" and "after" figures must be available.

Biologists have gone back ten years to assemble figures of waterfowl populations in three areas which are currently undergoing changes. These are Corps of Engineer projects in the Upper St. Johns, the Kissimmee River Valley, and the Withlacoochee Backwaters area of the Cross State Canal.

Increases or decreases in future waterfowl populations in these areas will ultimately determine the effects of these three modifications of waterfowl habitat.

THERE ARE SO MANY game species lost to causes other than hunters' guns that biologists are continually seeking the highest harvest level which will allow a maximum bag limit without interfering with future populations.

Along these lines, Frank Winston, Commission mourning dove specialist, working in conjunction with other Southeastern states, has been trapping and banding doves in ten locations in Florida.

Dale Crider, waterfowl biologist, has been busy banding migrant waterfowl in a three-fold research project to see if these birds can withstand additional harvesting, and to determine migration routes and times of migration.

Two-thousand birds were banded this year, mostly blue-winged teal, green-winged teal, wood ducks, scaup, and Canada geese.

Band return figures from doves and waterfowl, both groups classed as "migratory" and therefore under federal control regarding hunting regulations, will contribute to the nationwide picture and most likely support a larger harvest of doves in Florida as the majority of our population is composed of native birds.

WITH A TURKEY population second to none and a deer herd on a continued increase, Florida game biologists are not sitting idly by, basking in their well-earned laurels.

They're still trying to put even more turkeys and even more deer before Florida nimrods.

One effort involves a search for areas which have suitable cover and food for turkeys but which lack a turkey population. Air and ground surveys are being made to locate potential turkey home sites. Once an area passes inspection, turkeys trapped elsewhere in Florida are moved in and released from the ground or by the Florida-pioneered air-drop method.

An identical program applies to deer. Once suitable habitats are determined, deer are trapped from Eglin Field and several private ranches and released where the populations are not up to par.

FLORIDA WILDLIFE MAY well be looking at each other and asking, "who is next?" For attached electronic devices, tiny transistorized transmitters, are proving their worth in wildlife research.

Deer were the first to be saddled with the electronic snoopers. The signal (frequency not revealed to hunters) advised biologists of the whereabouts of the radio-equipped deer at all hours of the day or night. Rest and feeding periods and extent of browsing range could be clearly defined.

Now a few young female turkeys have been "transistorized" to enable biologists to snoop on their mating, time on and off the nest, habitat preference, foods and food preference, and mortality. For the first time, the location of turkey nests can be pinpointed.

These findings could result in determining if a habitat can be altered to accept a higher turkey population.

Electronic devices have also been attached to alligators to help fill in some missing information about their way of life.

Just which game species is going to be selected next as a mobile-broadcasting station isn't clear. ●

Super Sails

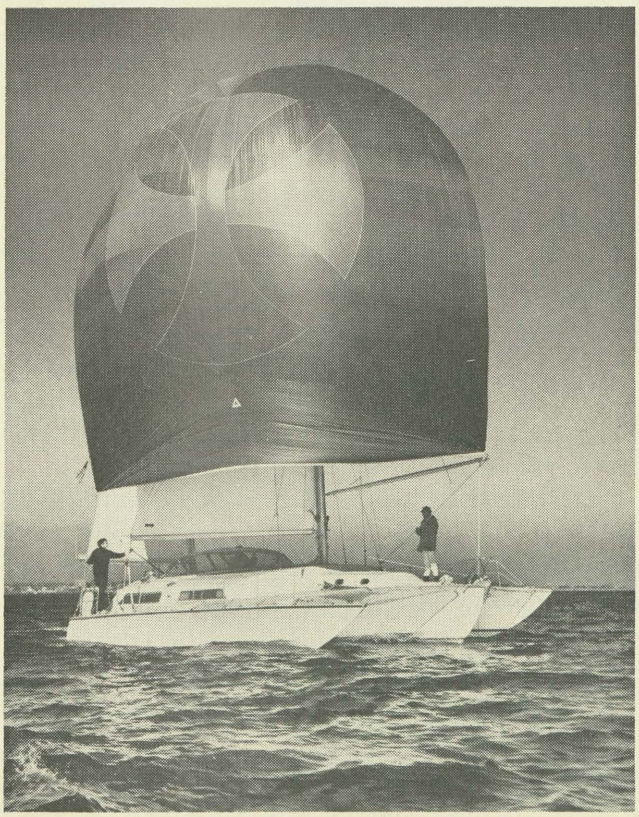
New models of sailing craft range from plush, sea-going trimarans to "shorty" styles for the small-boat clan

By ELGIN WHITE

WE MENTIONED THE Miami boat show back in February, and we had an opportunity to visit that extravaganza, and like I said before, if this thing gets any bigger, they will have to stretch the tip of the Florida peninsula to accommodate it.

In a lot of ways there was nothing new as far as exhibits and displays were concerned. But we did notice plenty of new craft along the dock area, and this is where many persons went as the more than 165,000 souls strolled through that show.

You sometimes wonder why so many people go to boat shows. You know darned good and well there is just a small percentage going there to see those luxury yachts with any idea at all about buying one. They had Matthews cruisers, Chris-Craft beauties and a 61-footer from the Huckins people in Jacksonville that simply made your mouth water. Then you saw the price tag and your mouth dried up like it was full of alum.



The magnificent trimaran sailing craft is a real answer for those who get "sickish" aboard sail boats. With a 26-foot beam, the "tri" can be as stable as the living room sofa.

The big babies carried tags from $38,995.95 (I suppose the 95 cents included tax) on up to $83,-000, and more. Now there is a limited appeal if I ever saw it, but the paraders went in, out and around those yachts and ooh'd and ahhh'd like they were going to buy one tomorrow.

Still, it is the lure of a beautiful boat that pulls 'em in from far and wide. And among the 165,000 that came and went, I am sure a heavy percentage of them saw some of the smaller family sized craft that appealed very much. For example, there was one rig that was a 14-foot family fishing craft that included boat, motor (a 12 h.p. job) and trailer for as little as $1195. With bank financing the way it is today, this little item and many like it made some pocket books open up and produce.

One craft we boarded there, though, was really a delight. Of course, it too is out of most ranges, for it retails at a cool $39,000, but what a craft!

It was a beautiful trimaran, a magnificent 41-foot sailboat with a 26'9" beam. It is almost as broad as it is long, and (get this) will sleep 13 persons. Thirteen is a bit cramped, I'd say, but it will sleep 9-to-10 in complete comfort. Wide and roomy, with all the complete gadgets of any floating home, this trimaran is as steady as Gibraltar in the water. She is a work of art.

The "Tri" was on hand through the courtesy of Symons-Sailing, Inc. of Tarpon Springs, and they gave us the royal tour of the boat. Or should I say "ship" since she's a sailer? Anyhow, she was a knockout. I have hopes of making a cruise through the Keys out to Dry Tortugas in the near future on a "tri" and when done, will have a complete report on the journey in FLORIDA WILDLIFE.

As usual, the big hit of the Miami boat show was the Italian display of Donzis. These little speed-sters are strictly for sport. Not too much room for a family bus, but they have style, and the typical Italian flair. But they are expensive, brother.

(Continued on next page)

(*Continued from preceding page*)

Though not in the five figure class of the big yachts, the Dons run up to 5 to 9 grand, but if you're a real boating buff, this is your ticket!

There seemed to be much more emphasis at this year's show on sailboats. Not only the large, graceful yachts you drool over, but the smaller, less expensive babies that anyone who is seriously interested in joining the boating fraternity can afford.

THERE IS GOING TO BE a lot more cruising activity along Florida's west coast now that the new segment of the intracoastal canal around Venice has been opened. This means a boater can whip it on up the west coast all the way from Ft. Myers to Tarpon Springs, a distance of about 150 miles, and we look for some boat-a-cades to get a-borning in the near future. It has been a long-time dream of most west coast boating enthusiasts to see this segment opened, and now the St. Petersburg, Tampa, Clearwater folks can put in at home and cruise all the way to Miami by cutting across the route through Lake Okeechobee without getting into outside water. How sweet it is!

There is some agitation (where isn't there some agitation?) from certain boating circles to extend the intracoastal through the Big Bend area to meet the present canal at St. Marks.

This is a bit prohibitive to my way of thinking. That would take in some 200 miles of canal digging, and frankly, there wouldn't be that much traffic. The new Florida cross-state barge canal will be used in the main by large tugs and barges that can cut across Florida and Apalachee Bay without having to be inside. It would be good for small boaters, but right now there just isn't enough of them to warrant such a gigantic expense as would be involved in extending the intracoastal all the way to St. Marks.

Of course, this has always been a boatman's dream, to be able to go all the way from Pensacola to Jacksonville, around the state via intracoastal canal. We can almost do it now, and with the larger family outboards and much increased horsepower in outboard motors, there is little danger these days in taking the Gulf for certain stretches. Besides, nine times out of ten the Gulf is as calm as a lake anyhow.

Let us give praise for the opening of this new 150-mile link. Let's enjoy it and forget the other for awhile.

SPEAKING OF CANALS, with the Cross-State barge canal moving forward, you'd best get the family cruiser out and make what could be a final cruise on the beautiful Oklawaha. Many waters of the Oklawaha are going to be diverted to the canal when the entire segment is open, and you won't be able to see the old twists and turns that you used to see when cruising this storied stream.

Chrysler's new "Stingray," a 13-foot plastic sailing delight, could prove just right for the small-boat sailing enthusiasts.

For many boaters, this is a tragedy. To just as many others, the canal will open new vistas with the extension of cross-state water from the St. Johns to the Gulf. We have never taken sides in this little bit on controversy that is continually raging between the conservationists and the Army Corp of Engineers, for we have witnessed arguments on both sides. In some ways I agree with conservationists. I truly hate to see the waters of this beautiful stream cut into a narrow straightaway for a canal.

But on the other hand, consider that the Oklawaha was almost impassable at points, particularly around Eureka. There was no great effort to clear this stream to make it more navigable, and the canal will certainly give us some new waters to travel and open new vistas in boat travel from east to west.

Be that as it may, if you have never cruised the Oklawaha, and many Florida boatmen have not, do it now. Tomorrow may be too late.

GETTING BACK TO sailboats for a moment, I wanted to mention a fine little craft that is being produced by, of all people, the Chrysler Corporation. Seems rather odd that Chrysler, making a big

splash in the outboard world, would come up with a neat little sailor, but that is exactly what they have done.

It is called a "Stingray," and is just what the doctor ordered for small boat sailing enthusiasts. The "Stingray" is only 13-feet long, and has the advantage of both sailboat and sailing board designs. She has the low-profile, high-speed planing hull of a board boat, but also the extra length and beam, plus a roomy cockpit.

The "Stingray" has a vacuum-formed plastic hull with exceptional strength, durability and resilience. The hull design is based upon the long, low lines of the famous inland racing scows.

The craft features a sturdy aluminum daggerboard which adjusts to three positions and locks with a pin. Her kick-up aluminum rudder has a plastic friction disc device which permits precise adjustments of the blade.

The "Stingray" has 95 square feet of dacron sail, and the mast comes apart in two sections for portability.

And the price? That's the nicest part . . . the "Stingray" has a suggested retail price of only $595.00. This is just the ticket for the new breed of sailing enthusiasts who are frequenting our lakes and bays in ever growing numbers.

GOT A NICE NOTE from Ed McKee down Miami way about our column mentioning the Peace River. Says Ed: . . . "the beauty, unspoiled beauty (and isolation) of this river is almost unbelievable.

"I speak from experience after about a 75-mile trip in my homemade canoe . . . and would like you to mention the park . . . at Zolfo Springs . . . it is really nice. As an avid FLORIDA WILDLIFE reader I always enjoy your articles . . . and again, thanks for mentioning the Peace River."

It is my pleasure, Ed. You gotta lot of class paddling that distance in a canoe, buddy. And we appreciate the kind words.

Ed isn't kidding when it comes to the Peace River. It is truly a shame that more Floridians don't take advantage of these magnificent small rivers in our state for cruises. You just can't visualize the beauty, and it can't be described in words. Even the pictures we have taken on these jaunts don't do real justice. Get out and see for yourself.

THIS INFORMATION is more in the camping line than boating, but I recently received a copy of the 1967 edition of Woodall's Directory listing, by the thousands, all the campsites and trailer park areas in the country.

WOODALL'S Trailering Parks and Campgrounds lists both en route and destination parks and camp sites and has nearly 10,000 more listings than any other national directory. Florida is given a big play in this year's issue, and the guide would be an invaluable addition to any camper's repertory. Most of these camp sites are located on some body of water, and our boating fraternity could well use this guidebook.

SURE HAS BEEN A LOT of new "stay afloat" devices come about in recent years.

As every boat owner knows, the law requires that a life jacket or preserver of an approved type be provided for everyone aboard the craft.

Just as with boats and motors, the stay-afloat devices have been modernized over the years.

Early life preservers were developed to be used aboard large passenger-carrying vessels, and were to be worn only when shipwreck was imminent.

To support personnel well on storm-tossed seas, the perserver was a jacket-like device having flotation material sewn in front and back.

Because it was awkward and uncomfortable to sit while wearing such a life preserver, the "buoyant vest" was developed in the early days of power boating. It has its flotation material at the front end only and is worn like a bib. Some models have collars designed to support the wearer's head above water.

Since both types are uncomfortable to wear in warm weather, particularly in the warmness we have down here in Florida nearly every day in the year, the growth of pleasure boating brought forth still another type, the buoyant cushion. This doubles as a seat cushion, and is valuable property in small boats where space is limited. Stuffed with a buoyant material enclosed in plastic so it cannot soak up water, fuel, or other liquid, the cushion can support a person in the water. I've seen some, though, that make me doubt their reliability. Some look as if they wouldn't support a Chiuhauha.

All boaters should understand, however, how to use this practical type of life preserver. It is NOT worn on the back like a knapsack, contrary to widespread notions. When thus worn it tends to tip a person's face into the water. I have seen many youngsters so strapped, and I have always been thankful that those youngsters weren't thrown into the water with the cushions so attached. They would have had a face full of aqua.

The correct way is to put your foot through one strap and pull it up your leg. Then run one arm through the other strap. Thus worn, it will stay with you and keep your face out of water.

Also in the event of a sudden upset it is possible for a buoyant cushion to fly clear of the boat and drift out of reach of the users. A short rope from the cushion's strap to one's belt will prevent this. However, never use the cushion's straps to tie it to some part of the boat. If that is done and the boat upsets, the cushion may be carried out of reach under a capsized boat. ●

Two fishermen can make satisfactory progress when canepoling if each carries a paddle. Here the bow paddler reaches for his pole and the stern paddler brings a fish to boat.

After You Get There

The fresh water angler often finds that it takes paddles, poles, or some type of "sneaky equipment" for the fishing conditions he has cruised into

By CHARLES WATERMAN

WITH A COUPLE OF thousand dollars afloat in a fast fishing outboard a new owner is hard to sell on fancy oars, an auxiliary motor or even a paddle that won't break.

Since fishermen get into shallow water, need to move silently and sometimes go where a breakdown isn't readily repaired, a secondary means of locomotion is nice. I don't know how many fishing boats I have towed in but the last one was a good example. It was a heavy, 16-footer with motor trouble which developed seven miles from a dock and up a seldom-traveled creek. I burned a lot of gas dragging it in.

When I gave them a line they had been creeping homeward for a couple of hours with a paddle the size of a butterknife which I assume they had previously used to maneuver around some bream fishing spots. The boat had such high sides the paddler could barely reach the water. Anyway, the area wasn't dangerous—just a long way from home. They weren't very effusive in their thanks for the tow, evidently figuring help is supposed to come along under such circumstances.

Muscle can maneuver a boat in a lot of ways and most fresh water fishermen will have better luck if they'll shut off the motor when fishing starts unless they're trolling. A book could be written on ways of powering a boat without sail or engine and in my limited world travels I've been amazed at some of the primitive methods. I've seen natives in the South Pacific zipping along in dugout canoes with one leg over the side and hooked around the paddle for a lot of power. You probably aren't interested in that system so I won't go into detail. Besides I tried it and my leg still hurts.

When one or two fishermen are casting from a boat 12 feet or longer I like oars for "pushing" with the oarsman facing forward. You can't go

nearly as fast that way as by facing the stern but in most fishing it's more important to see where you're going than where you've been and if the seats are in the right place you can turn around to really make time or hold the boat against a strong current. Guides who drift downstream in fairly swift water prefer to keep the boat upstream and they face the stern while "dropping the boat down." Their fishermen are in the stern and the oars are generally well forward.

With two casters at work I like to sit amidships with the oars, with one angler ahead of me and one behind. Most guides don't go for this as they want to see both clients but the advantage of my system is that the rods are further apart and less likely to cause tangles. Of course I can't tell when the stern caster is about to get one of my ears but I always figured the oarsman is safest when close to the caster and I've never been hooked.

The most efficient oars for traveling are loose in the "horns" and can thus be feathered or turned in any way to make maneuvering easier. Pinned or clamped oars draw snorts of derision from serious oarsmen but will stay put when you let go of them to string a crappie and generally give enough speed for fishing. Oars in ring-shaped locks have most of the advantages of both other kinds providing there is something to keep them from sliding all the way through and I don't know why they weren't more popular.

Most fishermen buy nice, handy oars that are much too short. It's better to make a mistake in the other direction. Width from gunwale to gunwale isn't the whole story as a high-sided boat uses a lot of oar length in simply reaching the water.

For example I have a little pram that measures 45 inches from gunwale to gunwale and pinned, 5-foot oars are too short. Another pair of oars 6½ feet long is better although the handle ends must be overlapped as you row. I'd say 6-footers would be better.

On a slender, 16-foot boat that's 56 inches across I have found pinned oars slightly over seven feet long to be ideal. On a wide, high-sided boat, six feet wide at the oarlocks, 8-foot oars are right but they aren't pinned. That's too much boat for pinned oars if you're going to move freely. Extra weight of heavy oars isn't very important when they're in use.

You may have trouble finding 8-footers for big boats and I can't tell you just where to get them. You'd have to inquire from a marine dealer and they might be a special order. The longest oars I see listed in my marine catalogs are 7½ feet. Big oars used in open horns should have leather or rubber guards to protect the oar shaft, keep it from slipping out when released momentarily and reduce noise.

Oars can be quieted with oil or rags and generally aren't too bad if everything fits. Metal blade tips are used by many boat liveries.

For smaller craft, paddles are satisfactory and many Florida fishermen use a single paddle from the bow of a skiff, sometimes wielding it one-handed and fishing with the other hand. Works fine with cane poles or when making short casts with a fly rod. You need one more hand with a spinning or casting reel.

I see some little, one-hand paddles built especially for the purpose and now and then I see a single paddler in the bow with two or more fishermen operating from behind him. In most cases he'd

(Continued on next page)

With pinned oars the fisherman can have both hands free when he is not actually under way, and can reach the handles easily when he wants to move. Pinned oars are satisfactory for smaller fishing boats, and even works on some craft up to 16 feet.

(*Continued from preceding page*)

probably rather be in the stern but the boat's just too wide for efficient paddling and no matter how good you are at operating from one side there comes a time when you'd like to cross over for a special maneuver and you have to get up and change positions on a typical outboard boat. It's nice to slip the bow into undisturbed water before sloshing into it with a paddle.

I've gone many a mile sitting on a gunwale and paddling a big, wide-bottomed fishing rig but it's backbreaking work. As with oars, most shoppers figure the lighter and shorter the better with paddles but one that comes up to your chin is generally about right. Only the best light paddles hold up well. There seems to be stiff price competition and a two-dollar one can be mighty flimsy.

Most of us use oars or paddles as emergency pushpoles, a good way to break either. Catch the blade of a paddle between a couple of rocks and you've generally had it.

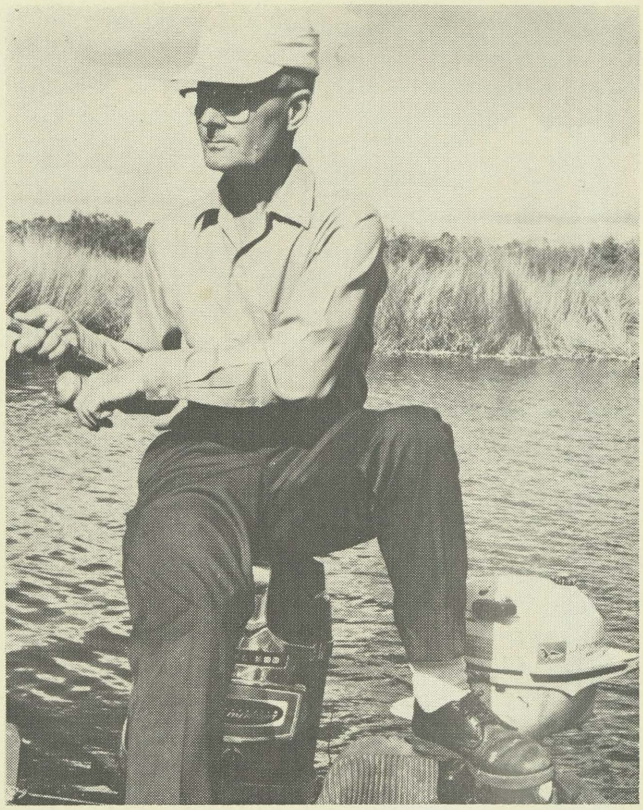
True sculling isn't seen much as an outboard motor clamps on where the sculling oar used to fit. Ocasionally the bow of an outboard boat is fitted up for sculling the boat backward but most Florida sportsfishermen wouldn't even know what that gadget was. If the load's right, the fastest way to paddle or pole an outboard is from the bow and toward the stern. You can get some of the transom out of the water that way and if the boat has a simple bow you get a sort of makeshift canoe effect. The wide bows of hulls with trick bottoms aren't much good for paddling. In fact, most of the cathedral or "pontoon" hulls aren't the best for hand propulsion.

Now if you use a canoe the hull is narrow enough to get the paddle out away from the gunwale and keep it quiet and a canoe, being made for going through water instead of over it, has it all over planing hulls for personal propulsion.

The 2-bladed paddle favored by kayak users has an advantage for fishermen because it can be laid across the gunwale of a light boat while you cast. I was watching an aluminum pram user with one of those the other day and he wasn't very speedy but he sure had control and he slipped silently through the bonnets.

There's a knack to pushpoling and those who shove heavy fishing boats over the Keys flats learn to brace the pole against one hip for steadiness and control. Where bottom is firm a pole can give you lots of go. I've heard of Seminole Indians who, working in pairs, could get incredible speed from a slim dugout. Would you believe 10 miles an hour? That's an estimate I've heard.

Usually, of course, the pole is for slow but completely controlled movement. I've seen polers go overboard ungracefully when their poles wedged in mud or between rocks, generally because they leaned over too far and became airborne when the



boat went on without them. You can put a lot of weight against the pole but you must keep your feet under you.

You can make a satisfactory foot for a pole in many ways. I simply screw a triangular piece of wood to the mud end. If a foot is a nuisance in the rocks you can push with the "handle." A commercially-built push pole head is the "Broadbill" which opens as you push it against the bottom and then closes as it's withdrawn.

A pushpole should be at least 12 feet long for most uses and fourteen feet or longer is better. Round poles about 1½ inches in diameter are satisfactory. A few fiberglass poles are in use, generally discarded vaulting poles, but they aren't readily available. Jointed poles can be rigged. I often carry a pushpole lashed to the underside of an automobile and have no difficulty.

Dozens of rigs have been built to facilitate human propulsion. One of the neatest is a pedal-driven outfit, the "Pedal Pusher," built by F. M. Yarbrough & Associates, P.O. Box 1566, Eustis, Florida 32726. A seat goes with it and you steer with your knees with both hands free for fishing. It will reverse and drives with a conventional propeller. It can be folded up into an easily carried package weighing only 23 pounds with handle and everything.

The designer built this for use on very small boats for quiet ponds but it has enough shove to maneuver a good-sized skiff. It's beautifully made and costs about $130. It's difficult to mount beside

an outboard of any size but it's a refined rig with all sorts of adjustments and tilts. Other manpower units include flexible sculling apparatus and hand-cranked propellers but these don't leave both hands free.

It takes a lot of practice but a very small outboard motor can be used for shoreline casting—no hands. Bob Budd of Jeffersonville, Ind., is the handiest man with this rig I know of. He uses a big motor for getting his boat to the fishing area and goes from there with a 3-horse motor. For knee or foot manipulating he prefers a motor that swings completely around rather than a gearshift model and he swears the latter won't work at all. Since a gearshift motor can be made to pull or push to all points of the compass it may be Bob is wrong about that but after years of practice with the other system he's not about to change.

He casts just as often as anyone in the boat, putting down one hand when the direction must be changed drastically. He will take you to shore while you unhook a hangup without ever missing a cast himself and then get out to proper casting distance without ever cutting the motor.

Such an engine must idle very slowly and Bob prefers one with a lot of hours on it.

"Sure don't need much compression for this kind of business," he says.

A well-worn propeller is a help too.

He uses a very light oil mix for the little motor, something that must be approached with caution and something which is likely to put the whole works on the fritz if you run Junior at high speed for long.

A steadily running little motor will bring you up pretty close to most fish without frightening them although there are some circumstances (as with tarpon) when it will move them. When nosed close to shore it is apt to temporarily ruin the shoreline you have already passed and sometimes it will louse up a congregation of crappie, for example, before you have pestered them as long as you wanted to. In shallow water I don't like it but it does enable the boat's operator to fish constantly.

Bob Budd has learned to use his with no accessories whatever. I've seen several homemade gadgets intended to simplify steering with the legs.

Incidentally, Florida's West Coast tarpon fishermen commonly use small motors with custom built topside exhaust. It's agreed that underwater exhaust is detrimental to fishing and repeated tests show that inboard boats (topside mufflers) outcatch outboards with underwater exhaust systems.

Electric motors are really tearing up the market since more big engines are equipped with generators or alternators. You can keep one battery on charge with the big motor while taking a long trip and you can keep a good battery charger at home.

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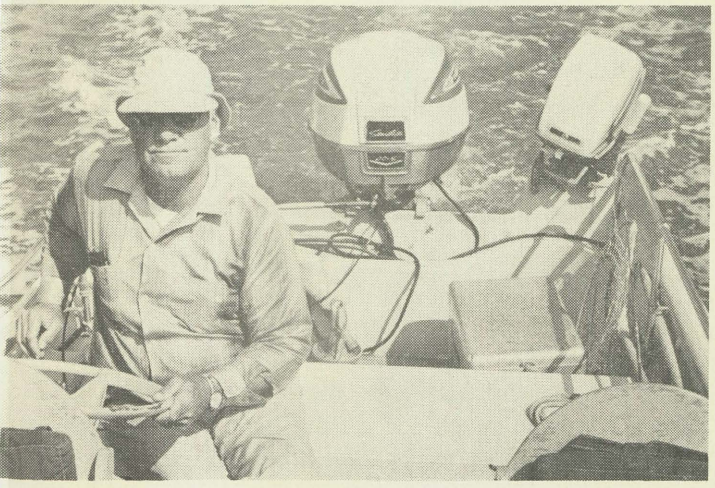


Years of practice enable Bob Budd, above left, to operate a 3-horse motor with one foot while he sits on the main power plant with both hands available for fishing. The light auxiliary type motor, above, can be mounted higher than bigger motors because the boat doesn't plane when it is in use. The boat is a 16-foot Boston Whaler with Everglades guide Ted Smallwood operating. Poling is the favorite method on bonefish flats, right, and some guides can shove a very large boat by steadying the pushpole against the hip. For heavier craft, most polers prefer working from bow, backward.

(*Continued from preceding page*)

Nothing makes me feel more plutocratic than to fish with a foot-operated electric motor. The installation is expensive but worth it for anyone who fishes alone with a reasonably light boat. Electric motors are quiet and unlikely to frighten fish. I don't like to listen to a constantly running gas engine, even if it does tick over smoothly.

I'm convinced the ideal rig for a lone fisherman is with the electric motor in the bow or on the gunwale near the bow. Guides generally keep their electrics at the stern.

To get the most out of an electric motor you need a boat that pushes easily, of course, and too much wind catching freeboard can foul you up. With a low-sided boat you can operate in considerable current but it's hard to turn into the wind with a high-sided 16-footer.

An expert electric motor operator is careful not to use more juice than necessary as it's top speed operation that pulls down the battery. Now I don't know just how much a fully-charged battery can do for you with an electric kicker because there's too much difference in what different batteries hold and too much difference in the way boats push. My one complaint with electrics is that they seem to take more juice than I expect, but my experience is limited and at least part of my use has been with unsuitable boats.

I have found that electrics don't scare fish and other fishermen agree. Even with nervous fish on salt water flats the electric motor does little spooking. The battery is the power limiting factor and if you want to use several of them you can tour the whole coast.

If you use the wind and currents carefully you can save a lot of muscle, electricity or gasoline as the case may be, but your maneuverability is best when headed *into* wind or current. You can do a lot of nifty drifting without power of any kind and a drifting expert will size up the situation in short order.

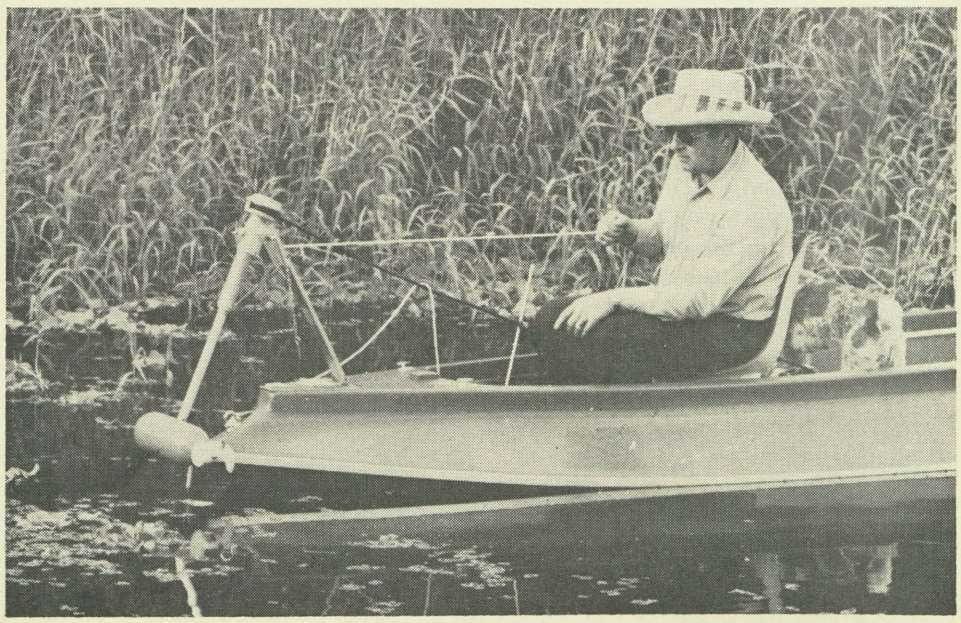
True sea anchors are generally too much trouble for drifting a skiff and I use a sashweight on the bottom with pretty good results, letting out more line if I'm going too fast. The dragging sashweight also makes landing a big fish a very sporty proposition. Tossing a roped bucket overboard in deeper water helps some. When engaged in very slow trolling with too much motor I've used a bucket as a drag—a canvas one was handiest. There used to be trolling attachments to reduce the thrust of outboard props but I haven't seen one for some time.

I have fished from high-sided boats that "sailed" beautifully in a wind; you had to cross a lake in a series of tacks. Generally it was a nuisance but if you knew which way she'd go in relation to the wind you could cut up a lake in neat sections.

I've seen some fishing done from a full-powered airboat with the engine running and although it didn't scare *all* of the fish it was too noisy to suit me. I've never used the very small motors with air propellers on skiffs in shallow water.

Good fishermen at work are harder to hear than poor fishermen. Above water talk probably has no bearing on the fishing, but boat vibrations are poison. Small motors mounted to cause excessive vibration will sabotage you and it's not necessarily the smallest engine that makes the least fuss. When you're fishing as you go, there is something to be said for the 2-cylinder kicker as it's usually smoother. However, some of the old hothead inboards shook the stew out of things and still seemed to work with salt water fish.

Don't spend so much for a new boat that there isn't enough left over for at least a pair of oars. ●



A foot-controlled electric motor works especially well at the bow of a boat. This one, a product of the Herschede Hall Clock Co., in Starkville, Miss., is called the Motor-Guide and is shown attached to a Skeeter fiberglass boat. It can be retracted, and stored on the bow of boat, when not in use.

Tree Kings

NINETEEN KINGS reign in Florida. The "kings" are champion trees, with royal status bestowed upon them because of their size. They're the largest known of their respective species. Like all true aristocrats, these woody monarchs are even listed in a social register.

Compiled by the American Forestry Association, the "Social Register of Big Trees" lists some 385 national champions crowned during the past 25 years.

Florida, with some 314 species growing in the state, ranks ninth with 19 champion trees.

"In its campaign to halt the tragic disappearance of magnificent trees, the American Forestry Association is seeking the largest living specimens of 865 species native to the continental United States," said State Forester C. H. Coulter.

The Association defines the "bigness" of a tree as the sum of its height, the circumference of the trunk four and one-half feet from the ground, and one-fourth of its crown spread.

"A tree keeps growing as long as it lives, but not necessarily in all three dimensions," Coulter said. "Some species stop growing upward after a time, but spread their crowns even wider and add layers of wood to their trunks."

Michigan is the leading state, with 48 champion trees. But California, ranked second with 43, boasts the tallest, oldest, and largest "champs."

The tallest known tree in the world is a redwood, reigning over the land of the Arcata Redwood Company in Humboldt County, California. It stretches skyward to a towering height of 368 feet.

Bristlecone pines are the oldest trees in the world. Some are estimated to be 4600 years old. Most of the bristlecone population is confined to the arid crags of California's White Mountains.

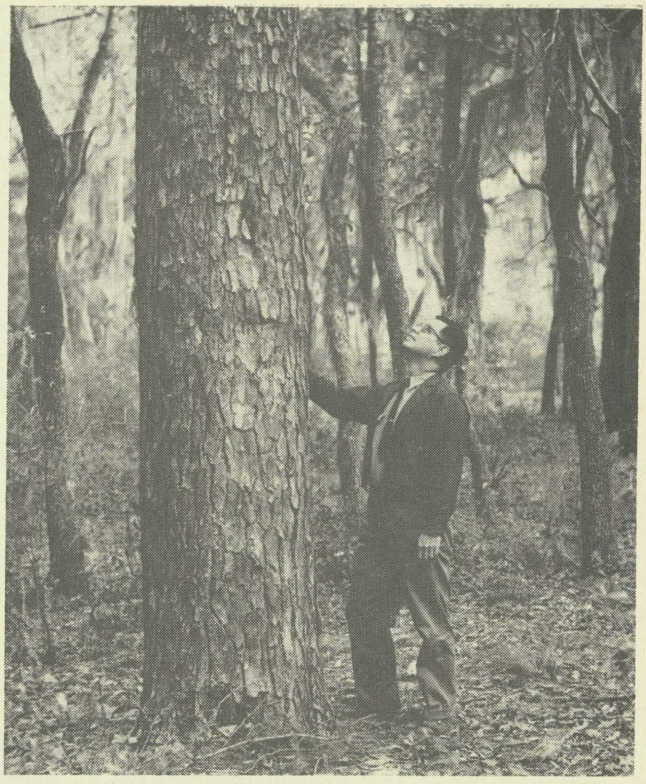
The largest known bristlecone, "The Patriarch," is just a teenager. It's only 1500 years old.

The biggest tree in the world, a giant sequoia called the "General Sherman," is some 3500 years old and contains 600,000 board feet of wood.

It would, for example, take 20 acres of the best slash pine plantation in Florida to equal this enormous volume of wood.

The most prominent discoverers of big trees are Kendall Laughlin, a Chicago botanist who has 52 nominations, and Paul Thompson of Birmingham, Michigan, with 38. Thompson is credited with nominating four of Florida's 19 champion trees.

Harold Nett of Detroit, Michigan, has located the most Florida king trees. He's nominated five. A team of two Gainesville men, R. W. Simons and D. B. Ward, found four.



U.S. Forest Service Photo

King Sand Pine, Ocala National Forest, is the largest of its species, and was discovered by J. H. Courtenay, of Tallahassee. Its circumference, 4½-feet above ground, is 6-feet 11-inches. The king's height is 91 feet, with a crown spread of 36 feet.

Elbert Schory of Ft. Myers and Ray Woodbury of Coral Gables are credited with locating two, as is John Courtenay of Tallahassee. William P. Wharton of Gorton, Mass., nominated one.

Some of the national champion trees growing in Florida, and their locations:

Horsetail Casuarina, Greynolds Park, North Miami; Doveplum, Simpson Park, Miami; False-Mastic, Matheson Hammock, near Miami; Strangler Fig, Bay Front Park, Miami; Coast Pignut, Winter Park; Gumbo-Limbo, Everglades National Park; Lebbek, Florida City.

The hunt for new champions is far from over. Some 480 species in the United States are uncrowned. And, of course, some of the old champions can be toppled by new discoveries.

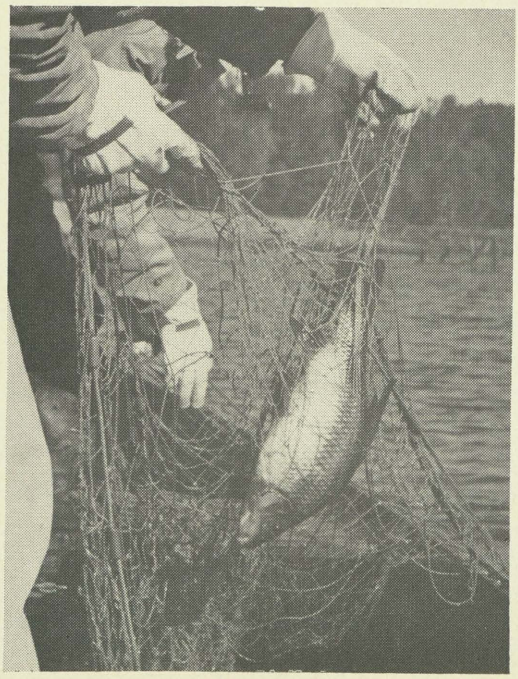
According to Elbert Schory, Tropical Research Forester for the Florida Forest Service, there are some specimens, particularly in south Florida and the Keys, which are bigger than the present titleholders. All they need is a nominator.

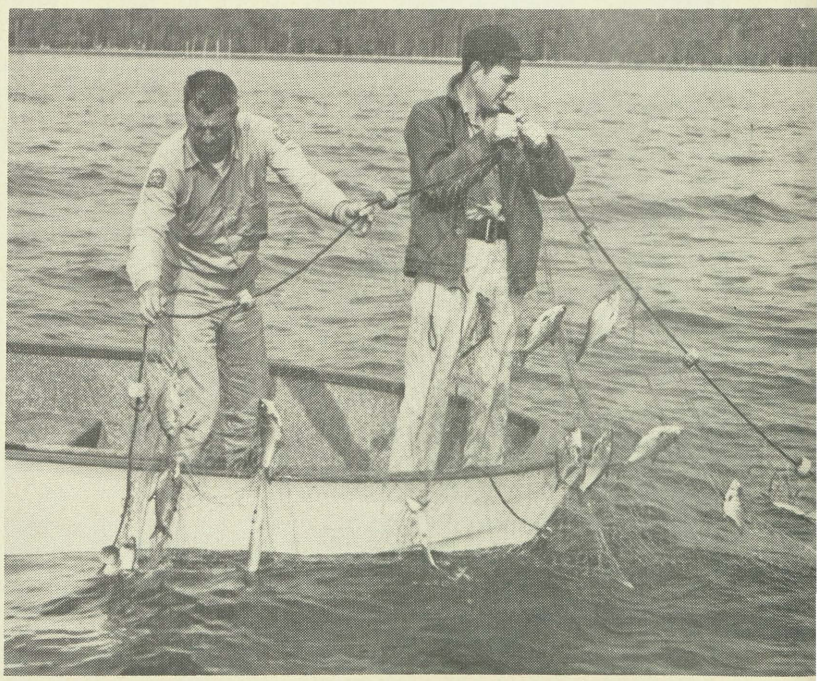
The American Forestry Association has a big tree nomination form which can be obtained by writing to the Florida Forest Service, Collins Building, Tallahassee.

Kings remain to be crowned. All you need is a tape measure, a good eye, a little bit of luck—and an appreciation of America's magnificent forest heritage. ●

Photo By Art Runnels

The trammel net, above, will catch various fish sizes; is actually three nets-in-one. Fish ensnare themselves, lower left, in the mesh. The gill net, lower right, is mainly used for the sample catching of adult fish.





The minnow seine is used to determine reproduction success by the capture of small fry and fingerlings.

By ART HUTT

Photo By Gene Smith

Fish Sampling Methods

Fresh water fish management research techniques are becoming increasingly specialized to assure the angler of continued success and enjoyment

NO MATTER WHERE an inventory is taken—supermarket, auto parts sales, novelty store—the purpose is to find out "what" and "how many."

Inventorying a lake through sampling is no different. It is the only practical way of determining the amount and the kinds of fish present. This information can then be used to formulate fish-management practices.

Sampling reveals many things. For one, it shows the success of reproduction by the number of fry and fingerlings present. Continued sampling shows rate of growth, mortality, potential reproduction, and when these fish will enter into the sport-fishing picture.

Sampling also reveals what species are in a lake, their numbers, and in what sizes.

When a new fish is introduced, such as stripers in Lake Hollingsworth, they can be kept track of through sampling.

Florida biologists adopt the method of inventory to the type of water they're working in and to the answers they're looking for.

Tools and Methods

AN IMPORTANT aspect of any fish management program is in determining reproduction success of the major game species. Knowing this success helps biologists predict the results anglers will have on the following seasons.

The best tool for determining this reproduction success is the minnow seine. It can be worked by two men along a shallow shoreline, its ¼-inch mesh and 50-foot length collecting fry, fingerlings, and sub-adults up to 4-to-5 inches long.

Trammel Net

THE TRAMMEL NET is actually three nets in one. The mesh of the center net is smaller in size than the mesh of the nets which hang on either side of it. When a fish safely passes through the first outer mesh, it hits the smaller, middle one. In struggling, it punches through a mesh-opening on the opposite side of the net, carrying a pocket of the inner mesh along, completely ensnaring itself in its own mesh bag.

Trammel nets catch fish of over ½-pound but they're often constructed with different mesh sizes on the same net in order to catch varying sizes of adult fish. They can be purchased to work from the bottom towards the top (more lead, fewer floats) or to hang from the surface and fish from the top down (more floats, less lead).

Normally a trammel net is set in the evening, run the next morning.

One virtue of the trammel net is that you can select the size fish you want to catch by using a corresponding mesh size. A drawback is that the net is heavy to work with, the fish are difficult to remove, and they are usually dead through their

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own exhausting struggles and through the difficulty of working them out of their mesh bag.

Gill Net

GILL NETS come in various mesh sizes from an inch on up, and like the trammel net, can be worked from the bottom or the surface of a lake. It, too, is usually set out in the evening, run in the morning.

When a fish pokes its nose through the mesh, it works itself in to a point where the mesh gets behind its gills or fins and leaves the fish in the embarrassing position where it can neither back up or go forward.

Most of these fish die through their struggles for freedom or are killed when they are worked out of the net.

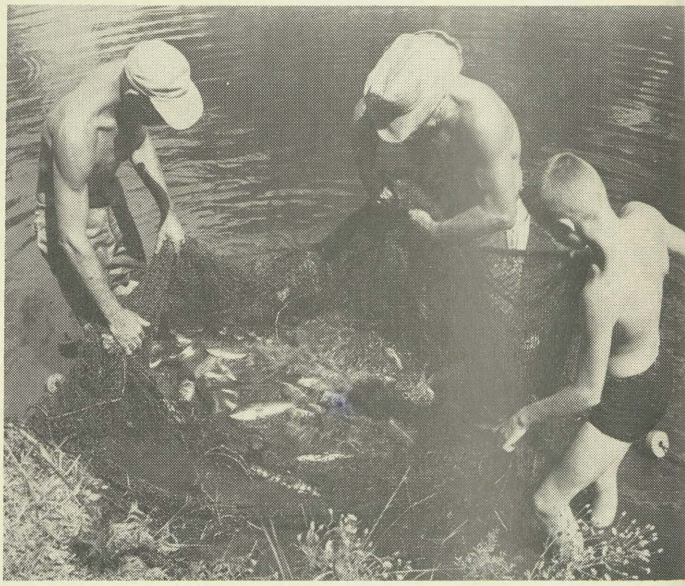
The gill net is used mainly to collect adult fish. A struggling fish can sometimes work itself through the encircling mesh of a gill net so this method of sampling is just a little less accurate than the trammel net.

Haul Seine

IF CONDITIONS are right, the haul seine can be one of the better sampling tools as it covers large expanses of water.

But, the area to be sampled must have an even and an unobstructed bottom. Old car bodies and discarded barbed wire are rough on a net.

The normal mesh size of a haul seine is about 4 inches on the wings and about one inch near the center. Its depth runs to about 15 feet. The seine is laid out in a big circle by a power launch, then pulled in at a common point. As it decreases in size, the fish are forced back and concentrated in a dead-end pocket from which they can be dip-netted.



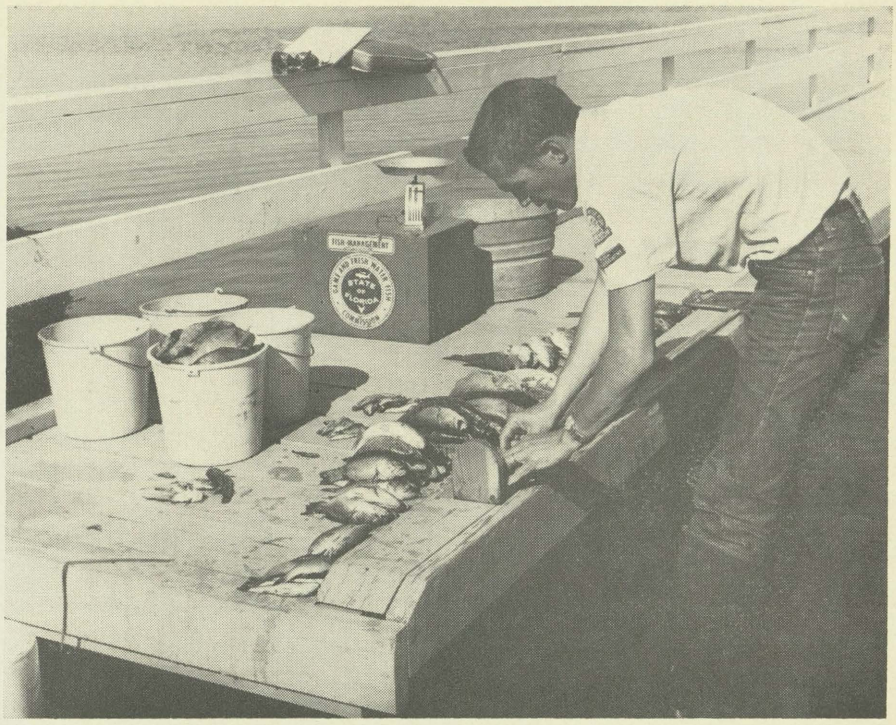
Due to the big area that can be covered, a haul seine gives a good overall picture of the adult population of a lake. A point in its favor, too, is that it allows fish to be examined and returned to the water alive.

The drawback is that it is costly to operate, demanding three men, a power launch, and an expensive net.

Block Net

THIS METHOD is rated by Florida biologists as being the most accurate sampling method yet de-

The big haul seine, left, is used to study overall adult fish populations. It gathers in fish from large expanses of water, and is pulled in at a common point to form a "pocket," lower left. Fish samples, right, taken from a body of water are sorted for study by fish biologists. The block net, below, used with rotenone, rates as being the most accurate of sampling methods devised.



Photos By Gene Smith

vised. It gives a 100 per cent composition of weight of all the fish, big and little, within a definite area.

In operation, a fine-meshed net 15-feet deep and long enough to enclose exactly one acre is set out quickly before the fish can move out of the area. It is closed and anchored at four corners. The area inside the net is then poisoned out with rotenone, biologists aiming at a 2 ppm saturation. Unless the water is too deep and the saturation too diluted by the time the chemical reaches the bottom, all fish within the net will be killed.

As the fish float to the surface, they're scooped up for later identification, counting, weighing, and measuring.

The net is left in the water for three days as some fish will sink, then come up to the surface on the second or third day.

And, by the end of that third day, they're a high-powered putrid mess but they get individually examined anyhow.

Drawbacks to block-net sampling are its restriction to shallow water (although most Florida lakes are relatively shallow), and the fact that the fine-meshed net and chemicals are fairly expensive.

Rotenone

THIS METHOD is similar to block-net sampling, except that no net is used, and therefore accuracy drops considerably.

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The electro-shocker is an efficient, easy way to collect fish without killing them. It is ideal for gathering brood stock for hatcheries.

Photo By Jim Floyd

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An acre-area is marked off and poison applied within the markers.

But gars, catfish, and mudfish will scoot when they first feel the effects of the downward drifting chemical. Activities of the boats and motors overhead sometimes flush fish out of the area. Predator fish move in to feed on the dying smaller fish, reducing their numbers to be counted, and themselves "loaded up" with the chemical and turning belly up.

Also, if there are any shad around, a biased impression may result. Shad are very susceptible to rotenone so there may be several acres of dead shad fringing the one central total-kill hotspot. This happens with the block net, too, but the physical barrier of the net prevents any intermixing and tends to erase any biased impression.

Electric Shocking

FOR EFFICIENCY, portability, and ease of operation, the electro-shocker is another of the better sampling tools—with reservations. It won't work in deep water, temperature of the water can be a factor in its effectiveness, and the water must meet certain density requirements to enable the shocker to operate at peak efficiency.

Essentially the electro-shocker is a self-contained, mobile, electrocuting machine which sends pulses of AC current through the water between positive and negative electrodes held out on booms. When a fish enters the field of electricity flowing between these electrodes, it is stunned but not killed. The fish can be scooped up, examined, and returned to the water none the worse for wear.

This rig was first worked out in South Florida to help rid the canals of some of the rough fish, particularly gars and mudfish. Canals supply most of the fresh-water sportfishing in this area and usual methods of sampling could not be accomplished successfully there.

The first rig, a monster called Spider 1, was a success, but it covered so much area and stunned so many fish that it physically exhausted the crews who had to hand-net them.

Present-day electro-shockers are smaller.

While it is possible to totally electrocute and kill fish with enough voltage, to do this would require bigger and heavier generators than normally used—which would in turn present a hazardous condition to the operators. Immobilizing fish by electronarcosis is the aim.

Oddly enough, shockers don't bother little fish. There seems to be something about the amount of body surface exposed.

In a clear, unfertile lake, a shocker won't turn up the first fish. An ideal situation is a fertile lake. When used in saline water, the generator speeds up and burns out. The key to such varied actions in the conductivities of the different water types.

Temperature sometimes influences catches by inhibiting the muscular reaction of the fish to electrical stimulus.

Electro-shocking is ideal for collecting for contests, for gathering brood stock for hatcheries, and to get some big fish to display at fairs.

Of course, sampling only once in any given body of water won't prove much. The area must be returned to again and again before the statistics can tell the story.

Gorge Horel, Fisheries Biologist with the Game and Fresh Water Fish Commission, is currently working on a Dingell-Johnson project in which he is sampling, mostly with a block net, eight of Florida's larger public lakes (Apopka, Griffin, Guano, Harris, Hollingsworth, Parker, and Trafford, with work on Newnans completed). He and his crew hit each lake twice a year, making up to five samplings each. His volumes of records include the types of fish, their abundance, their weight, their length, plus physical and chemical characteristics of the lake on the day of the sampling. These findings help the biologists determine trends and the management techniques by which the fishing in the lake can be bettered.

A random sampling is best, even necessary, to give a true picture of the lake's population. If only the choicest coves were selected, the sampling would be biased in favor of gamefish. If only middle-of-the-lake samplings were made, again the figures would be biased in favor of shad which would be more likely to be found in the open water.

Biologists are frequently accused of "killing" all the fish in the lake." A block-net sampling of one acre of a big lake possibly removes less desirable fish from the lake than a doctor does blood from your finger when he makes a hemoglobin count. It all goes back to the same fact that a Florida fish grows so rapidly that those removed will be replaced so fast that those few taken out will never be missed. Overlooked, too, is the fact that a lake will only support so many fish. When this "saturation" is reached, the population levels off.

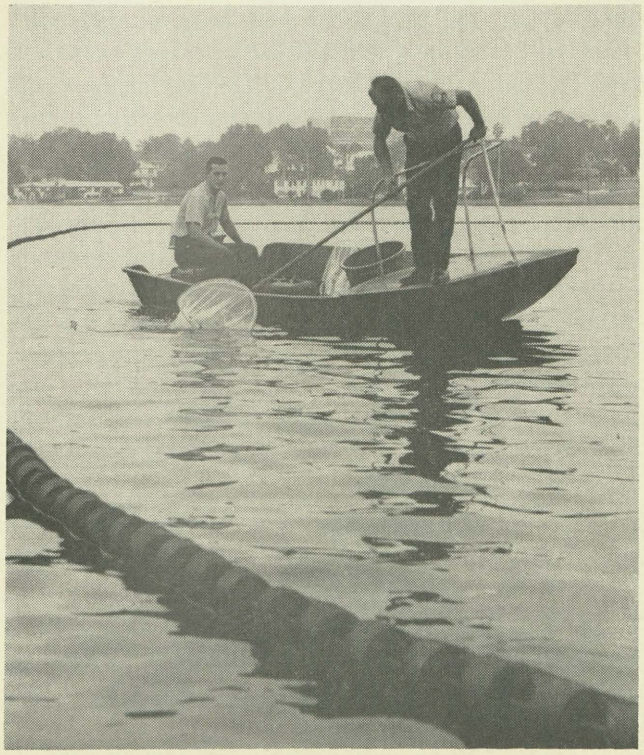
On those fish collected that can still be termed "fresh," every attempt is made to put them in hands where they will not go to waste. Other fish are usually buried.

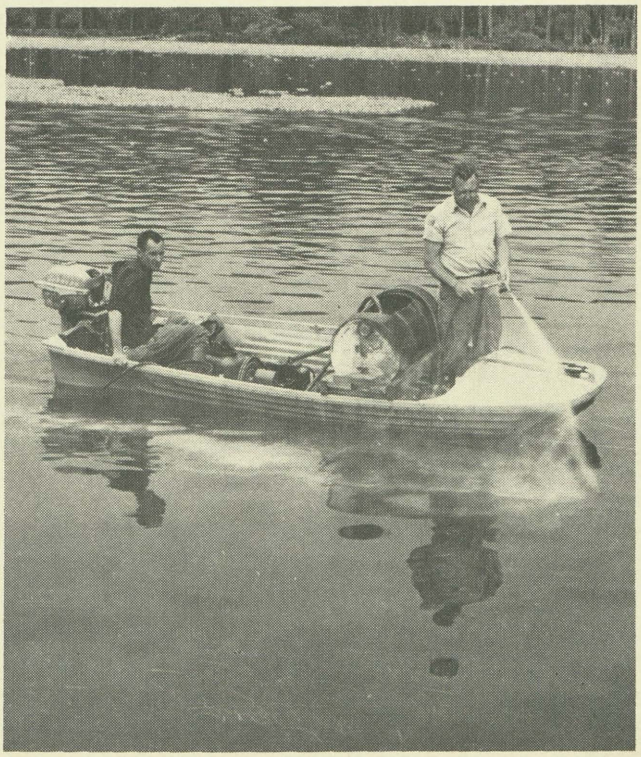
The next time you see some Commission activity on a lake, perhaps what they're doing will fall into one of the sampling techniques mentioned above.

You can be assured they'll be working for your benefit with the ultimate goal of improving your fishing. ●

The application of rotenone is another fish sampling method. It is not an accurate means of sampling except when used with a block net, right.

Photos By Gene Smith





Just a few days aquatic-home cruise will generate a desire for future vacation adventures — afloat

Houseboating

OUR HOUSEBOAT CRUISE on a central Florida chain of lakes got underway with all the festivity of a trans-Atlantic voyage on a great ocean liner.

Friends came aboard the 30-foot aquatic "apartment" we had rented for the cruise. A gala bon voyage dinner was planned. At dusk, the "all ashore that's going ashore" call was sounded and our guests scrambled into the small boat they had tied behind our craft and sped back to Kissimmee, where we had begun the three-day cruise we planned through the Kissimmee River Valley waterway.

Guests gone, my husband, Bill, piloted the houseboat toward the south end of huge Lake Tohopekaliga where we would anchor for the night near the South Port Canal, leaving the fun of going through the canal's single lock for the next morning.

While he steered the boat, I did the dishes from the fried chicken dinner I had cooked and served our guests in the efficient galley on the houseboat.

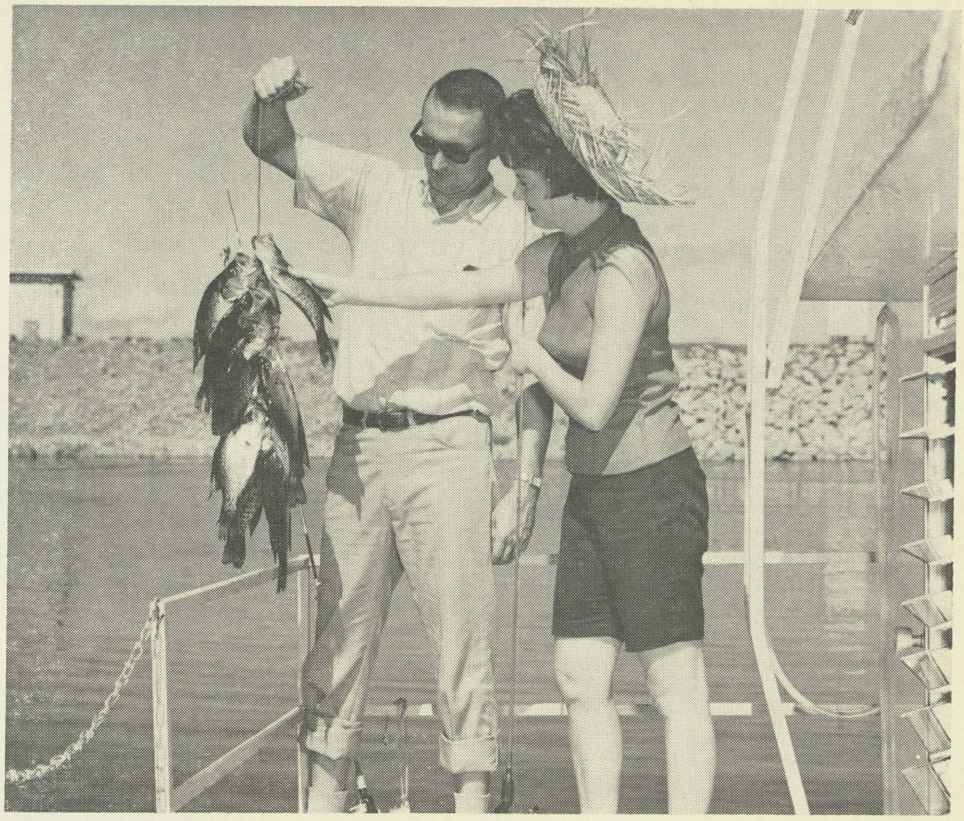
That afternoon, before beginning our cruise at the Surfside 6 docks in Kissimmee, we had been given a briefing on how to pilot the boat and read the navigational charts of the hundred-mile-plus waterway. It was a quick and easy "capsule course," even for landlubbers. Once on the lake, almost out of sight of land, Bill soon became expert at following a course.

When we had anchored for the night, we fished for awhile from the bow of the boat, or should I say front porch? As it grew dark, we watched a magnificent display of lightning in towering thunderheads on the horizon. Miles away, Mother Nature was putting on a spectacular in living color with stereophonic sound. Above us the sky was clear and filled with stars that seemed much closer than they ever did on land. The lake was calm, the boat absolutely still.

Later, we watched television in the main cabin for awhile, but the fare seemed puny after Nature's show and we soon switched it off.

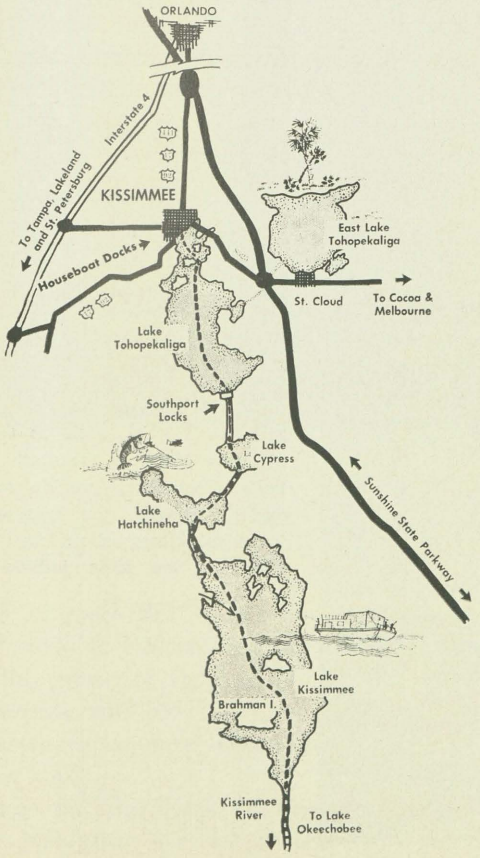
Bill checked to be sure the anchors were holding while I made up the beds. The great lake was so calm we almost forgot we were afloat. Soon we were asleep.

When the sun set on huge Lake Kissimmee, left, we felt very much alone. A houseboat cruise is fast becoming a popular way of getting away from it all, and still have the comforts of home. Our cruise took us into fine fishing waters, right, and our string of speckled perch was something to be proud of.



Adventure

By NANCY BROWER



The sun in our eyes awakened us before six the next morning. (There had been no need to draw the curtains the night before—civilization was far away.)

Bill was eager for the adventure of going through the lock in the canal. He cruised slowly in that direction as I prepared breakfast. We were ravenous and ate a big, typically southern breakfast.

Lock-tender Lawrence Tomlinson invited us to come ashore and have a look at the complex machinery of the lock after Bill had successfully negotiated the houseboat through the rather narrow channel, THE piloting challenge of the whole trip.

Mrs. Tomlinson came out of their nearby house to see our unusual craft. She came aboard, followed by their little dog. The dog was determined to make the trip with us and finally had to be carried bodily from the houseboat, ending his chances of being a canine stowaway.

In the canal linking Tohopekaliga with Cypress Lake, a small, but lovely jewel on the chain of lakes, we tried fishing again. We caught a mess of speckled perch just in time for lunch. With hush puppies, grits and tossed green salad, fish never tasted better.

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While I cooked the fish, Bill kept the houseboat cruising along at a good speed. We moved out of the canal, into Cypress Lake and via another canal, into Lake Hatchineha. We crossed only a corner of the latter lake, which is bordered by majestic cypress trees. Camp Mack, a secluded fish camp on the northern end of vast Lake Kissimmee, was our destination. We planned to arrive there in mid-afternoon to take on gas and water.

As the entire crew, it was my job to toss the rope to the man waiting to tie the houseboat up to the docks at Camp Mack. My aim was poor and I had to toss the rope several times, splashing the patient dockhand in the process. By the time we had docked, many people had gathered to look at the houseboat. We invited them to have a closer look and they clambered aboard.

Women oohed and aahed at our deluxe split-level accommodations. Children took the pilot wheel and twisted it madly, imagining themselves on the high seas. The men examined the big twin outboard motors that propelled the craft and inquired about the fishing news we'd heard. We reported our catch in the canal and they told us where the fish were biting in Lake Kissimmee.

The Leon Bentons, proprietors of Camp Mack, invited us to leave our houseboat at the dock and spend the evening in camp. This is the sort of warm hospitality we encountered all along the waterway. We were tempted to stay and hear the fish stories swapped in camp that night, but the lure of the open waters of sprawling Lake Kissimmee was strong. We headed into mid-lake.

Consulting the skies and his charts, the captain announced that we'd better make for Bird Island to anchor for the night. It looked like a thunderstorm was moving toward us.

Bird Island is well named. It is a small hump of land near the center of the lake and was inhabited only by birds, mostly waterbirds. As they flocked in to roost for the night, their cries on the rising wind gave an eerie quality to the twilight.

We felt snug and safe on the houseboat, but very much alone, rather like the only two people on earth, afloat on a modern ark.

The thunderstorm skirted us, but the wind remained, gently rocking the houseboat like a cradle and lulling us to sleep. The morning was calm and beautiful. We slept late, ignoring the sun which brazenly peeked in the windows.

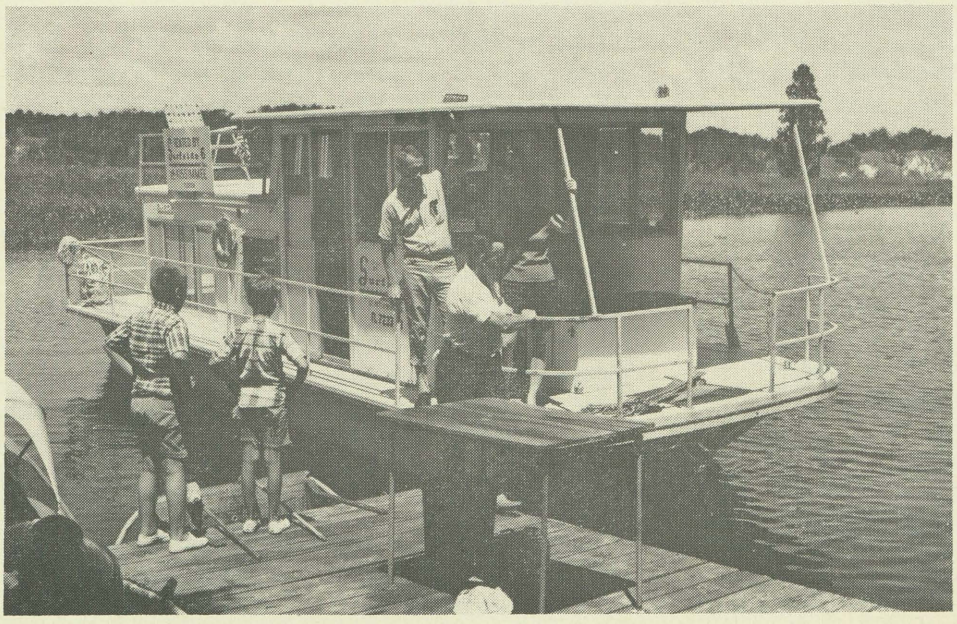
I dressed for the day in my bathing suit. Our life on the lakes had become very casual.

The morning's destination was the bridge on Highway 60 where it crosses the neck of Lake Kissimmee. At the bridge, the lake narrows into the Kissimmee River and begins its 75-mile journey to Lake Okeechobee, an island sea.

The bridge was to be the turning point in our cruise. From there, about 40 miles from where we had started (not allowing for exploring we did), we would begin the return voyage. The river is navigable by houseboat and many make the journey all the way to the lake, but we lacked the time to make this sub-tropical wilderness trip.

As we neared the narrows at the bridge, we found that huge clumps of Florida's beautiful pest, the water hyacinth, had drifted into the main channel, almost obscuring it. We needed to stop at The Oasis, a fish camp on the highway beside the bridge, for gas, so going all the way to the bridge was a necessary as well as aesthetic goal.

I took the wheel while the skipper went topside to pick out the main channel among the labyrinthine mass of hyacinths. He quickly chose the right channel and we soon pulled into the Oasis. Once again we caught up on the news of the lakes



Fish camp stops, such as this one at Camp Mack on the north end of Lake Kissimmee, provide supplies and sociability for houseboating journeys. News about the fishing action is the main talking topic.

Houseboats may be rented by the day, week end, or week, at several Florida cities. Landlubbers can learn to pilot a houseboat in a few minutes.

and rivers, gave what fishing information we had gathered and were host to people interested in our boat.

Back in Lake Kissimmee on the return trip, we stayed close to the eastern shore to see the herds of cattle, many of them Brahmas descended from the sacred cows of India, grazing on the huge ranches that dominate the entire eastern side of the chain of lakes.

Nearly all the land in the Kissimmee River Valley bordering on the waterway is owned by cattlemen and citrus growers. This undeveloped land, with no mark of man upon it save an occasional fence, is as wildly beautiful now as it was at the beginning of time.

Even taking time out to try likely-looking fishing spots (we were concentrating on bass now) and to explore an interesting cove, we made it from the bridge on Highway 60 to the canal entering Lake Tohopekaliga in less than eight hours. We anchored near the entrance to the canal to spend our last night on the houseboat.

That night we had a neighbor. Another houseboat anchored nearby. A neighborly call was in order, but we observed that the man was very intent on his fishing and had left the boat and waded up to his chin. We decided to skip the sociability and go swimming instead.

We felt we were greeting old friends when we waved to the Tomlinsons as we again passed through the lock at South Port that admitted us to Lake Tohopekaliga, where our voyage had begun three days earlier.

I piloted the boat on the home stretch to give Bill a last chance to fish in this big lake which produced at least three of the larger bass caught in Florida last year—mammoth 12 to 14 pounders, according to records kept by Field & Stream magazine.

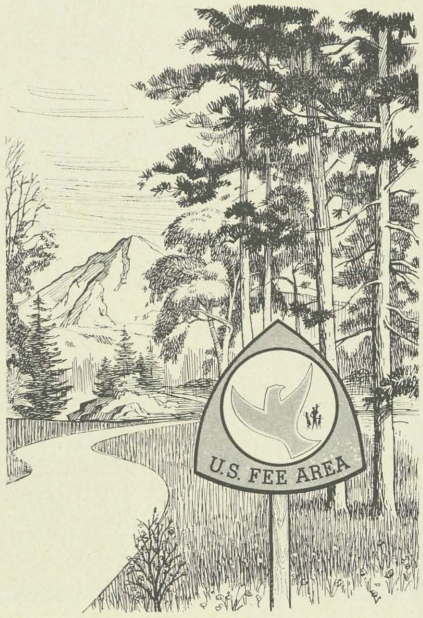
Back at the Surfside 6 docks in Kissimmee, we discovered we had developed sea legs during our time on the water. We swayed "drunkenly" for our first few steps on land.

After making the houseboat shipshape, we reluctantly turned the rental craft over to the agency, ready for its next tenants. The days we had spent in sunny solitude on the big boat had left us refreshed and relaxed and ready to start the voyage all over again. ●

Golden Eagle Pass

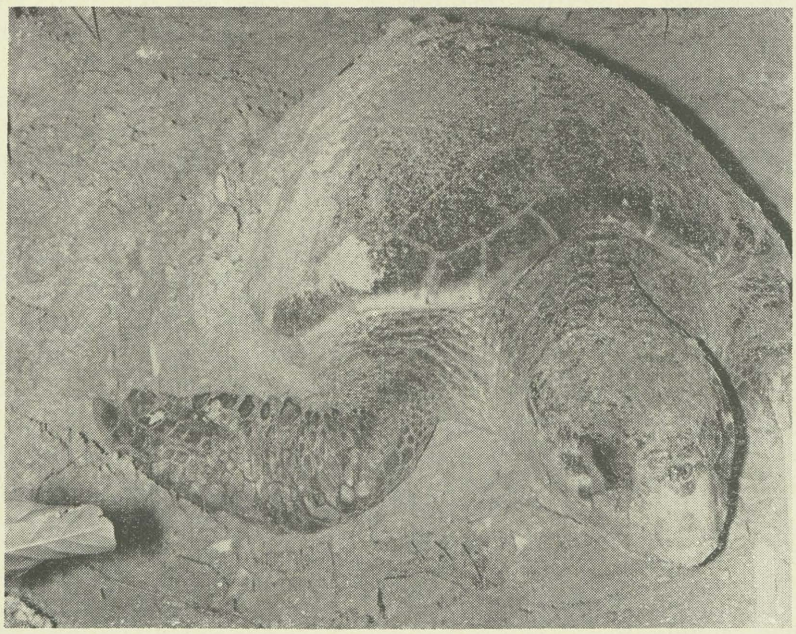
THIS YEAR, for the first time, all Federal land managing agencies will use one official sign to designate Federal recreation areas where entrance and user fees are charged.

A golden eagle — official Government symbol for Operation Golden Eagle — predominates on a white background in the new sign. A silhouetted family of four stand under the wing of the eagle. They are shown in midnight blue, as are the words at the base of the triangular sign, "U.S. Fee Area." Operation Golden Eagle's purpose is to provide more outdoor recreation opportunities across the Nation through the Land and Water Conservation Fund program.



The sign will be posted at Federal recreation areas to indicate where the $7 Golden Eagle Passport and short-term permits are valid for entry by private automobile, and at areas that charge admission and user fees. The 1967 annual permit is valid an unlimited number of times between April 1, 1967, and March 31, 1968.

Federal land administering agencies — the Forest Service, National Park Service, Army Corps of Engineers, Bureau of Sport Fisheries and Wildlife, Bureau of Land Management, Bureau of Reclamation and Tennessee Valley Authority — are responsible for posting the official designation sign at all entrances to designated fee areas. The new sign may be displayed alongside existing entrance signs or incorporated into other signs. ●



Giant loggerhead turtles — some weighing up to 500 pounds — will soon begin their annual "coming ashore" along Florida's coast to lay eggs in the beach sand, where they bury them to hatch. June is a favorite month for vacationers who go on turtle watches to see this unusual spectacle, but the strange sea turtle egg laying season continues on into August.

Audubon Sanctuary

TEN ACRES of undeveloped land in Nassau County, Florida, became a wilderness sanctuary of the Florida Audubon Society, through a gift of Carl R. and Christine Froitzheim, Crowley, Louisiana. The Froitzheims only recently became members of the Society as they discovered the Conservation in Action program in which they are definitely interested. The deed calls for the retention of the land in its present wilderness state subject only to natural elements.

The tract lies in Section 2, Township 1 North, Range 24E, and is typical woodland of the northeast section of Florida. It can be approached by driving three miles south from Callahan on U.S. Highway 301, then west on a graded dirt road for a half mile. Inspection by members of the Duval Audubon chapter indicated that half the property is well-grazed pasture land which ties with other open land owned by other members of the Froitzheim family.

A swampy creek bordered by scrubby hardwoods crosses the tract from north to south, spreading into a dense cypress swamp which covers the southeast quarter of the tract and extends beyond to the south and west, is the report from the inspection committee. There are a few pines in the northwest corner of the tract and along the west edge of the hardwoods.

The sanctuary will be held by the Society as a wilderness area, according to the Froitzheims' wishes and should prove increasingly attractive to land birds as the years pass. There are also good feeding and nesting conditions for birds on contiguous property. ●

MOVING?

If you are planning to move, please send notification four weeks before changing address. Send your address label from a current issue, plus your NEW address. This will ensure continued subscription service.

Muddler Minnow

The muddler "thing" can be fished on top, or deep, and can be used with both fly tackle and spinning gear

By CHARLES WATERMAN

POSSIBLY BECAUSE I am a simple soul, I love to fish for bluegills and their near relatives.

Most fishermen, even those who lean to the most sporty tackle for other fish, tend to think of panfish as something to be teamed with grits or hushpuppies as unceremoniously as possible, and if they can get him to the skillet quicker by yanking him overhead he'll get the ride.

I have cornfielded quite a few bream myself but I get so much fun fishing for them with artificials that it's been a long time since I speared a cricket or worm. When things are right I do better than I would with bait.

Ultra-light spinning gear made panfishing a new ballgame although fly fishermen had been using artificials for a long time.

If I can sell the editor on the idea I'm going to write a full-length dirge on very small lures and flies shortly, but right now I want to remark on techniques (if you can use so potent a term on a 6-ounce fish).

For one thing, if there are panfish in shallow water they're likely to give themselves away before long. Either they'll make popping noises near the vegetation or show up in small swirls along the bank. The more canny panfishermen can smell bream beds but if you lack olfactory radar you can look for other signs and panfish are noted for concentrating in some areas to the exclusion of others that look about the same.

Move a lot to start with and when you find some fish slow down and fish every good spot.

A livewell is handy for panfish. Net "live bags" are good too but few fishermen use them. Herter's Inc., Waseca, Minnesota, is one source, selling inexpensive cord bags as well as wire mesh ones.

Most panfish are simply threaded on cords passed through their gills. That's tough on the fish as when another one is put on top of him it's gill cover comes down over his nose. Crowding is a primary cause of dead fish on such stringers.

Wire snaps aren't perfect either. Big bluegills for example, can be torn off a wire stringer very easily and are almost certain to escape if held by only one lip.

It should be kept as quiet as possible but there are fishermen who would rather fish for bream than bass or sailfish.

A THING THAT LOOKS a little like everything and exactly like nothing is the Muddler Minnow, a "fly" invented by Don Gapen of Ontario years ago.

This thing, the subject of many learned articles, has been fished on top, dressed to float; has been fished deep with fly tackle in a current; has been cast with a spinning outfit and a bubble or float and has been weighted for deep fishing with spinning gear. It is also a good trailer for a plug when chunked at schooling bass.

The muddler was designed for fresh water trout and, although I kept hearing how good it was for other fish, I figured that was just the babbling of fishermen who wanted me to think they had discovered something.

I'm not trying to sell you on this muddler business. Muddlers are difficult to tie and, hence, are expensive, costing up to 80 cents or more dependent on the size needed. And, of course, being made of deer hair, turkey feathers, calf tail, squirrel tail and tinsel, a muddler won't last forever.

(Continued on next page)

The muddler minnow looks a little like almost anything and exactly like nothing. Here it is in two sizes. It catches various Florida fish, from snook to bluegills.

(*Continued from preceding page*)

The head is made up of cropped deer hair but some tyers leave it shaggy while others snip it short (some adapt the haircut to the kind of fishing). There is some tinsel around the hook shank to give just a little flash but the overall color is usually natural deer hair which appears pretty gunky in the water—kind of a dull brown. Some muddler connisseurs have them made up in the colors of the rainbow but I think the original sad sack hue is about as good as any most of the time.

Even at the price charged it takes time to build muddlers and I know a fly manufacturer who claims he married the only girl he could find who was a muddler expert. Just couldn't let her get away, he claimed.

I had been catching northern trout with muddlers for ten years before I inflicted them on Florida fish. Then, just to say I'd done it, I put on a little size 10 muddler (I can afford them because my wife ties them) and threw it into a bunch of ravenous bluegills. I caught bluegills all right but we all know a hungry bluegill will sometimes strike a piece of cotton sock so that wasn't exactly an acid test for Florida muddlers.

It was much later that I cleaned up on snook with it on the Tamiami Trail canal. The snook were medium-size and blasting small minnows against the sawgrass side of the canal (which is simply a roadside ditch running across South Florida beside U.S. No. 41). The bait the snook were slurping was dirty-colored little low-order fishes of some sort and they didn't seem to care for my classy streamer flies.

The muddler was just what they wanted and in this case they preferred it sunken well below the surface. I was fishing with George Radel who is a real canal expert and has forgotten more about ditch fishing than I'll ever learn. My success caused George to tie on a muddler too and it *did* seem to match the bait pretty well.

The other day I found some yearling bass, no more than 10 inches, striking small bait just as the snook had done months before. I caught and released twenty-some of these bass with a No. 10 muddler. I could get one now and then with a very light spinning lure and, occasionally, with a small popping bug, but the muddler was what they wanted for their trophy cases and if I didn't strike back quickly it would take needle-nose pliers to get back my lure.

If you put a small sinker well ahead of the muddler and fish it with light spinning tackle you'll sometimes do pretty well. It has very little action under such handicap but will draw strikes if it plunks among feeding fish. Bumping the sinker on the bottom will also get some results, they say, but I've never tried that.

The camera caddy, shown here with Nikonos underwater camera, leaves both hands free, and holds the camera against the body out of the way. "Suspenders" can also be used for binoculars.

If you put some fly line dressing on a muddler and keep it on top it cuts up pretty well, and if the head is made fairly large it will pop.

I would say that this is an example of a "bug" that will give spectacular results under certain circumstances. It is specialized, however, and to list it as a consistent winner day in and day out would be a mistake.

Most large tackle firms that specialize in fly tackle have muddlers listed in their catalogs. Unless you plan to use a great many, learning to tie them is too much bother.

I HAVE A LITTLE elastic harness called a "Camera Caddy" sold by Jack Worsfold Associates, Box 25, Forest Hill, Md. 21050. It lists for $3.95 and holds a camera or pair of binoculars snugly against your chest to keep them from flopping around in your way. It's well worthwhile for me although few fishermen bother to keep a camera in immediate readiness.

When you want to use the camera you simply stretch the elastic strap that holds it against your shirt. I use it with a small, underwater camera but it will work with heavier equipment.

When I carry binoculars I generally keep them on a very short leather strap up under my chin, but that won't work for the camera because I can't get it far enough from my eyes (bi-focal type) to read the gadgets. With the Camera Caddy I can stretch the elastic and read 'er. It is a specialized piece of equipment but it sure works.

Grits Gresham of Louisiana wrote a book on bass fishing. Grits is both an outdoor writer and an outdoorsman (the terms aren't necessarily synonomous) and has caught a heck of a lot of bass in his time. He and I went snook fishing once at Everglades.

I have no idea how many books have been written on black bass, undoubtedly the most popular gamefish of the country, and I have read some real smellers on the subject. Like a lot of magazine articles, many of them purport to reveal sensational secrets for surefire catches and others seem to have been written because somebody decided it was time for a new bass book.

Well, Grits' book is about the best of the bunch so far. He covers the subject, beginning with layman's biology and then going through the important bit about finding the fish—a common sense approach rather than a single, earth shattering revelation. And, best of all, he uses the opinions and experiences of other established and successful bass catchers rather than sailing off as an all-seeing, all-knowing bass genius. Finally he thoroughly covers the latest fishing methods and gives basic casting instruction.

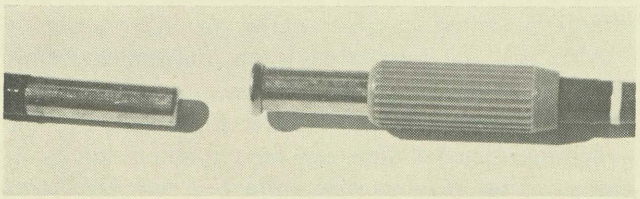
This one is good. It's an Outdoor Life Book, costing $5.95 from Harper & Row. The title is COMPLETE BOOK OF BASS FISHING

I don't sell them, even if this does sound like a commercial pitch.

I'VE WRITTEN ABOUT the glass rods without metal ferrules. In one type (Fenwick) the tip section simply slides over the butt section. In the Hardy the sections are connected with a "plug."

The "sleeve ferrule" as used by the Cast A Way Rod Company in Hialeah employs a delrin "sleeve" which slides over the joint and they say it works no matter how much corrosion is present. The female ferrule is slotted so that it will tighten down over the male section when the sleeve is pushed over the joint. I've never used one but they say this patented device is a way around the sticking ferrule business.

A BRAND NEW SHINER fisherman asked me the other day about stiff spinning rods, saying he couldn't set the hook with the one he's been using.



Sliding sleeve is used to close ferrule of Cast A Way rods made in Hialeah. The showroom is at 6927 Biscayne Blvd.

The typical fresh water spinning rod intended for ¼-ounce lures simply won't get the job done with big Florida shiners. Not only is it tough to cast one but when hook-setting time comes after you've let the fish swim off with your bait, possibly around a bonnet stem and through a clump of grass or two, the light rod will bend into a hoop of futility as you lean on it and the bass will just wonder who else wants the shiner.

When you come right down to it light salt water tackle isn't out of place at all with 9-inch shiners as bait and it might keep you from falling out of a boat while seeking a tight line. The 200-pound fisherman trying to set a hook with a soft spinning rod while standing in a 9-foot boat is still my favorite comic.

If you have to do it you should lean toward the fish the last possible inch, take up all the slack you dare, keep the drag pretty tight and put a lot of body into it. Being a good swimmer is a help if the boat is small.

A free-spooling conventional reel is preferred by many.

Joe Kenner, the St. Johns River guide, says good bass fishing comes when the water is between 62 and 76 degrees. Joe, who has a lot of experience with bass, is fairly well in line with the temperature preferences of other fishermen I know.

He's speaking of Florida bass, of course, and they like colder water in some places. Joe would be the last to say you can't catch bass when the water is warmer or colder but those are his *preferred* limits.

I'm often surprised by thermometer readings, and generally they're warmer than I expect. A tentative finger in the water isn't good basis for profound pronunciations as to the bass activity for the day.

After looking at weather report statistics fishermen are apt to forget that air temperatures are taken in the shade and that most fishing water is exposed to the sun. Again, we might have a winter reading below freezing but if the chill was short, water could remain pretty warm.

Tests of calm, surface water are a poor indication of temperatures down where most of the fish are living. On bright, sunny days in summer the shallows can get almost to chowder temperatures and, of course, the fish are in cooler spots. Hence, the morning and evening fishing are nearly always better if you fish the shallows.

Not enough of us use thermometers.

OVERHEARD FROM the back of a big tackle store: "That was the biggest, slimiest, meanest looking dam' eel ever caught so I got out my big old bayonet knife but he wiggled and that's how I cut my rod in two." ●

Muzzle Flashes

There are ways you can work on gunstocks to make that favorite hunting gun look almost like new

By EDMUND McLAURIN

NO MATTER HOW assidously a gun owner attempts to protect his weapon from marring, use afield is certain to endow it with marks of service. Slight scratches and wood dents are common. Occasionally there are wood fractures or deep gouges.

Barbed wire fences can be rough on shotgun stocks, and Jeep transportation and climbing in and out of tree stands equally so on rifles.

Sooner or later, there comes a time when gunstock appearance leaves much to be desired. Fortunately, most gunstock refinishing can be inexpensively done and without prolonged, discouraging effort.

The months between hunting seasons is the time to tackle gunstock refinishing. You simply won't get it done if you wait until only a short time before hunting season; there will be too many other preparations to handle.

Many different types of finishes are now used on gunstocks by manufacturers, gunsmiths and owners—varnish, lacquer, french polishing, plastic finishes and linseed oil finishes are most commonly encountered.

Each has its proponents, but linseed oil finishing has undeniably proved its worth as one of the best, in beauty as well as durability. But it is a method that requires both time and a lot of applied elbow grease before final results accrue. Impatient refinishers—in a hurry to see results—often elect to use a faster but usually less practical type of refinishing.

Whatever refinishing method is chosen, the gunstock should be first cleaned of all old finish and grease to a fresh, clean wood surface; stained darker tone if desired; repeatedly sanded with the grain, and given treatment with a wood-grain filler to seal the sub-surface wood pores; and again very carefully sanded and thoroughly cleaned. Remember, *final results will be commensurate with preliminary surface preparation.*

Gunstock refinishing is best carried out with stock removed from the firearm. In the case of a two-piece stock, this also means removal of separately attaching fore-end.

However, before removing the stock consider whether or not any physical alteration is needed for better fit—possibly the face-supporting comb needs to be raised or lowered, length of pull increased or shortened, or objectionable recoil reduced through the addition of a recoil pad. The time to take care of these minor changes is while you have the gunstock detached. Your reward will be more accurate, comfortable shooting.

A gunstock which punishes the shooter's cheek needs slight removal of wood from comb at peak, tapering to no wood removal at all at heel of stock. Even as little as $\frac{1}{16}$th of an inch of wood removed or added to a gunstock comb will make a decided difference in face and aiming eye alignment.

Where comb height needs to be raised to properly support and steady the shooter's face, a matching piece of walnut can be glued and doweled on the comb, then worked to correct shape and face fit.

Some of the new epoxy cements are amazingly strong and perfect agents for repairing gunstocks broken across grip or comb and for adding a strip of wood to comb for a higher sighting plane, often needed when a scope sight is put on a rifle originally stocked for metallic sight line. You can even get some of the epoxy adhesives in walnut colors that closely match a gunstock's wood tones.

The better grades of epoxies usually come in two-part containers, which require mixing of ingredients prior to use. Proper mixing is important; follow supplied directions every time!

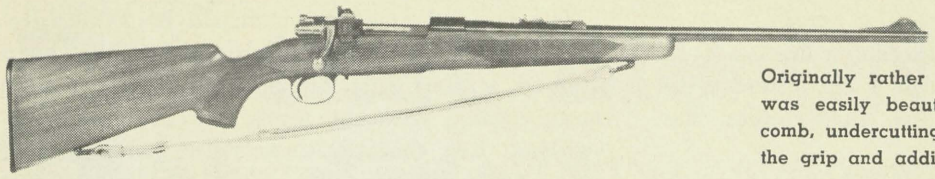
Epoxy cements for gunstocks can be had from Brownell's, Inc., Montezuma, Iowa 50171.

Increase in overall stock length, or length of pull, can be taken care of through the addition of a Pachmayr recoil pad of approximate needed thickness and whatever additional decorative spacers may be needed. The Pachmayr recoil pads are made of tough neoprene rubber and are unaffected by contact with oils and greases. A variety of styles and pad thicknesses are available.

Where a gunstock has to be shortened, because of already being too long or because addition of a recoil cushion pad will make it so, the correct length of pull must be determined (including the thickness of the attached recoil pad, if any) before any cutting is attempted. The reduced length of the stock, plus the thickness of the rubber recoil pad or butt-plate that will be attached, should, together, equal the pre-determined correct overall length.

Also, original butt-stock pitch, if correct, should be maintained by careful measuring and marking prior to any stock length reduction.

White adhesive tape can be put on a stock and the saw-line shown on it, or a line can be drawn on the wood itself and covered with transparent tape. The tape wrapping helps prevent wood



Originally rather plain looking, this factory model was easily beautified by slightly fluting nose of comb, undercutting the back of pistol grip, capping the grip and adding stippling effect within borders.

splinters and also protects the stock when the attached recoil pad or replaced butt-plate is sanded down to perfect fit.

Actually, neatly reducing original stock length and perfectly attaching a recoil pad are two operations most shooters might wisely consign to a professional gunsmith who has the needed fine-toothed hand or power saw to accurately cut the gunstock, and the sander or grinder to shape the attached recoil pad to perfect fit. The cost, above the price of the needed recoil pad, is usually nominal. When gunstock and attached pad are returned to owner, wood finishing can proceed, with or without temporary removal of the already fitted pad.

While gunstock is removed from action is a good time to also consider minor, beneficial changes to its general appearance.

Sometimes only a few strokes of wood rasp or shaping file are needed to pleasingly alter the lines of a rather plain looking factory stock. The pistol grip and comb of an unaltered Remington Model 721 or Model 722 stock, for example, can be given more pleasing contours by slightly undercutting the back of the factory shaped pistol grip and adding a white-line spacer style cap to the grip, and by attractively fluting the nose of the comb of the stock.

Quite frequently a hard-used gunstock is seen with its original checkering broken in numerous places or simply worn almost flat within still sharp border lines.

After carefully sanding the worn checkering to a uniformly flat surface, coarse stippling can be executed within such bordered areas in lieu of re-checkering to again provide contrasting appearance and non-slip hand hold on the stock's half-pistol grip and forearm.

You can easily make a stippling tool from a piece of $\frac{5}{16}$ steel rod or a nail of similar diameter. Saw or file one end of the rod or nail to a square face. Next, file this square face on one side only, to create a point and a rough tear-drop shape. The shaped face surface is then carefully checkered with either a small metal checkering file or precise strokes with a small triangular file. The tool permits stippling right up to the edges and corners of a bordered outline.

Stippling is accomplished by holding the tool between thumb and first two fingers, about $\frac{1}{32}$nd of an inch above the work, then tapping with a light hammer, repeating the process on the adjacent, unworked wood. It is important that taps of the stippling tool break the wood fibers rather than merely dent them. For better control of the work, the stock or fore-end being worked on should be chucked in a vise. The worker should feel a slight bounce-back of the stippling tool from the wood, with each hammer tap.

Fortunately, stippling requires very little practice to obtain almost professional results.

After the stippling has been completed, boiled linseed oil is applied to the worked areas, allowed to penetrate a few minutes, then all traces of excess oil are immediately removed by brushing with an old toothbrush. Surplus oil should never be allowed to gradually dry and gum either stippling or cleaned and reoiled checkering.

Varnishing is a fast and easy way to refinish a gunstock, but is far from being practical approach, whether carefully brush applied or flawlessly sprayed on. Varnish is brittle, scratches easily, usually darkens with age and is almost impossible to match when small area blemishes eventually occur from gun use. Lacquer, although faster drying, is in the same category.

Ease of application and economical mass production are the reasons why many of the present age firearms manufacturers are giving gunstocks spray treatment.

Seemingly an improvement on varnish is Sherwin Williams' "Marvethane," an easy flowing polyurethane product that gives a tough, glossy, waterproof finish to gunstocks without the inherent faults of varnish. Secret of results is to apply "Marvethane" in thin coats after every possible blemish has been removed from the surface of the stock, then patiently hand rubbing and polishing the hardened finish. "Marvethane" will show impact dents incurred hrough inadvertent hard knocks and bumps, but will not easily surface-break like varnish. In many instances, minor blemishes collected through field service can be polished out of an unbroken "Marvethane" coating.

For the gun owner who first practices on scrap blocks of walnut or an old stock, french polishing is a quick way to refinish a gunstock primarily intended for display, rather than field service. Boiled linseed oil of the thinnest consistency is used in combination with alcohol-thinned white shellac and a lintless cloth pad.

The wood to be refinished by this method must first be treated with a wood-grain filler and then wiped perfectly clean. A $1\frac{1}{2}$ inch size, lintless cotton cloth is saturated with linseed oil and the excess squeezed out. A few drops of shellac are

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next placed on the pad, and the pad is immediately applied to the wood, rubbed rapidly and hard with the grain until pad and wood glaze under the heat of friction.

A compromise—and better—method of french polishing is to first give the cleaned and wood-grain filled stock a complete coat of boiled linseed oil.

From two can lids respectively holding $\frac{1}{8}$" of linseed oil and $\frac{1}{16}$" of thin, clear shellac, a mixture of linseed oil and shellac is applied to the still oil-wet stock by dipping the heel of the hand alternately and lightly in the shallow containers of oil and shellac, then hand rubbing the gunstock wood until oil and shellac are used up for that particular application. Repeat until the entire stock has been covered.

A maximum of six thin coatings can be applied, but at least an hour should elapse between each. Should shellac build up unevenly at any particular spot, cut it down by hard rubbing with a piece of burlap.

As a final step, let the stock cure for several days. Finish the job with an application of unadulterated linseed oil. The achieved finish will have a nice sheen and unlike orthodox french polishing results, will withstand hard usage.

Oil finishing—the method custom stock makers favor—demands patient, repeated applications of pure boiled linseed oil to a previously grain-filled, sealed and sanded wood surface. But you cannot merely douse gunstock with linseed oil and hand or wheel buff!

The first oil application should be a *mixture* of the linseed oil and a commercial drier, heavily applied, rubbed with burlap across the grain, then hand rubbed with the grain until no excess oil is evident. Let the gunstock stand in a cool, dry place for a day or two. Give the wood another linseed oil treatment—undiluted this time. Rub or buff until no excess oil is left.

Repeat the pure oil treatment five more times, with a minimum waiting period of three days between coats. (If at any time the surface of the wood should take on a tacky appearance, take a piece of burlap and rub the wood to satin smoothness.) You'll wind up with a beautiful and durable gunstock finish, if you use this time proven refinishing method, step by step.

Don't forget the action that awaits return of refinished stock. Give all metal parts a good cleaning and mechanical check-up. Mineral spirits and a small brush will help you do a good cleaning job. Let all cleaned parts dry thoroughly.

Any of a number of good cold chemical gun bluing solutions will suffice to touch up worn, shiny spots on barrel or action.

Saddle soap is the refurbishing agent to use on a leather sling strap and genuine leather carrying cases and accessories. It will not only remove dirt from leather articles but, like neatsfoot oil, will keep them soft and pliable.

If you start now, you can have your pet hunting rifle or shotgun looking almost like new. You will then have only to wait for hunting season to fill your game bag. ●

The Magic Gimmick

By JOHN MADSON
Olin Mathieson Chemical Corporation

BACKPACKERS SAY that the less you carry in your head, the more you must carry on your back. It's like that with hunting, too, and sportsmen who know the least may own the most. In fact, there's a whole new breed of sportsmen who don't really know much about the outdoors, but who are ring-tailed wizards with outdoor gadgets.

To such men, the joy of consumer goods is a substitute for basic outdoor skills. They may never learn to use iron sights, or how to row a boat, use snowshoes, cook on an open fire, or swing an axe. What's more, they couldn't care less. Dan'l Boone might have felt the same way, if he'd had our gadgets.

When an outdoor situation demands special skill or physical endurance, many modern sportsmen can't rest until they have found a gadget that substitutes for both. They have traded woodcraft for technology, and consider it a bargain.

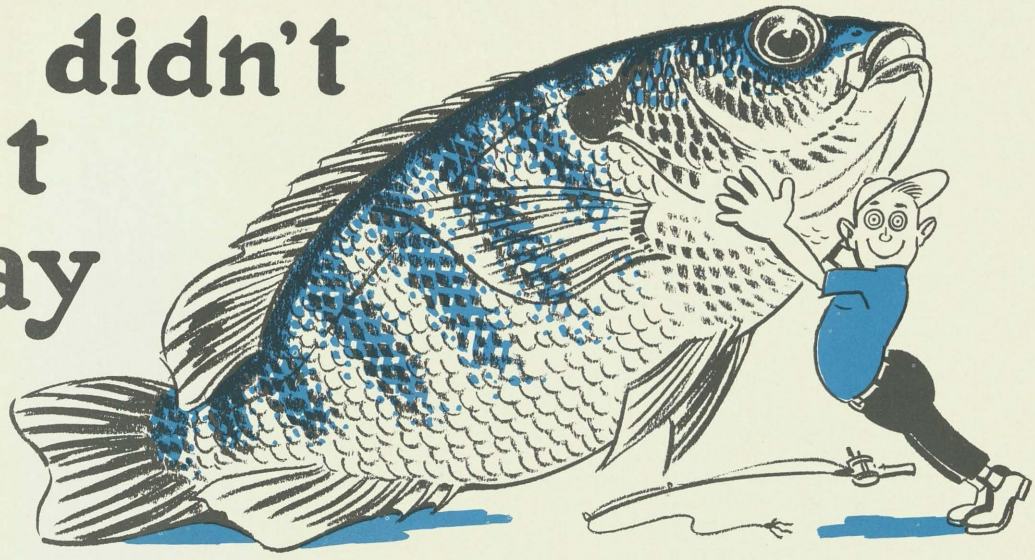
Maybe it is. It gets people outdoors, puts roses in the economy's cheeks, and saves time—the most important item in outdoor recreation.

The real rub comes when the hunter extends this philosophy into game management. He figures that if his own needs can be solved with gimmicks, so can wildlife's. So he substitutes legislation for a basic land ethic, buys duck stamps instead of squelching federal drainage subsidies, and builds artificial lakes when sick watersheds can no longer support healthy rivers. He invents artificial wood duck nests, water guzzlers for desert quail, nesting tubs for geese, and rubber-tire squirrel nests.

There's nothing wrong with these, as far as they go. Even such patent medicines as stocking, bounties, predator control and winter feeding can be useful, as aspirin is useful. But they aren't cures!

The only real cure for ailing wildlife crops is basic land and water conservation, with some attention to wildlife habitat. There is no magic gimmick for producing good supplies of wildlife without good supplies of soil and water. If there were, nature would already have found it, and there'd be mallards in Death Valley and moose in Manhattan. ●

For that BIG ONE that didn't get away



ELIGIBILITY REQUIREMENTS
SPECIES

LARGEMOUTH BASS

.....8 pounds or larger

CHAIN PICKEREL

.....4 pounds or larger

BLUEGILL (BREAM)

.....1 ½ pounds or larger

SHELLCRACKER

.....2 pounds or larger

BLACK CRAPPIE

.....2 pounds or larger

RED BREAST

.....1 pound or larger

All fish must be taken from the fresh waters of the state of Florida, as defined by the Game and Fresh Water Fish Commission. Fish must be caught on conventional fishing tackle, with artificial or live bait, in the presence of at least one witness.

The catch must be weighed and recorded at a fishing camp or tackle store within the state by the owner, manager, or an authorized agent of the respective establishment.

FLORIDA WILDLIFE'S
FISHING CITATION

is available without charge, to any and all subscribers to Florida Wildlife Magazine, and their immediate families, who catch any of the fresh-water game fish of the prescribed species and size requirements. Citation, showing recorded date of the catch, will be mailed to the applicant upon receipt of the following application form that has been properly filled out and signed.

Only fishing citation applications received within 90 days from date of catch will be honored.

APPLICATION FOR FLORIDA WILDLIFE FISHING CITATION

The Editor, FLORIDA WILDLIFE
Game & Fresh Water Fish Commission, Tallahassee, Fla.

Date_____

Please send me the Florida Wildlife Fishing Citation with the inscribed data listed below:

Name (please print)_____

Address _____

City_____ State_____ Zip No._____

Species_____ Weight_____ Length_____

Type of Tackle_____

Bait or Lure Used_____

Where Caught_____ in_____ County

Date Caught_____ Catch Witnessed By_____

Registered, Weighed By_____ At_____

Signature of Applicant_____

CUT OUT AND SAVE THIS APPLICATION BLANK

Black Bear Cub

Photo By Leonard Lee Rue III

FLORIDA WILDLIFE Magazine
Game & Fresh Water Fish Commission
Tallahassee, Florida 32304

please print or type

Name _____

Street No. _____

City _____

State _____ Zip Code _____